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Building your tomorrow today

2015 Doosan E&C CSR Report

BUILDING YOUR TOMORROW TODAY



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About This Report

Reporting Principles

This report is Doosan E&C's (Engineering & Construction) third CSR report compiled in line with the Core Option of the Global Reporting Initiative (GRI) G4 Guidelines and with reference to the IR Framework of the IIRC (International Integrated Reporting Council). This report is being published annually.

Reporting Period and Scope

The reporting period for this report is from January 1 to December 31, 2015. For key performances, data of three years (2013-2015) has been included to enable a trend analysis. The scope of the report covers our entire domestic worksites including the head office in Korea and some overseas worksites. In the future, we plan to continuously expand the scope of the report.

Assurance

IMCSR, an independent assurance agency, conducted verification on the report to enhance the transparency and reliability of the reporting process and contents. Pages 62 and 63 include the verification results.

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About Doosan

Affiliates of Doosan

ISB (Infrastructure Support Business)

Doosan Heavy Industries & Construction
Doosan Engineering & Construction
Doosan Infracore
Doosan Engine

Doosan Corporation

Doosan Corporation Electro-Materials
Doosan Corporation Mottrol
Doosan Corporation Glonet
Doosan Corporation Industrial Vehicle
Doosan Corporation Fuel Cell
Doosan Corporation Information & Communications
Doosan Corporation Doota Duty Free

CSB (Consumer & Service Business)

Oricom
Hancomm
Doosan Magazine
Doosan Feed & Livestock
Doota Mall
Doosan Bears
Doosan Cuvox
Neoplux

Affiliated Organizations

Doosan Yonkang Foundation
Doosan Art Center
DLI
Dongdaemun Future Foundation

Financial Highlights in 2015

Total Assets

KRW **31,556.3** billion

Total Equity

KRW **8,393.5** billion

Sales

KRW **18,960.4** billion

Operating Profit

KRW **264.6** billion

Doosan adopted ' *Building your tomorrow today* ' as a corporate slogan based on the belief that Doosan contributes to the mankind and the future, which is shared by all employees. As such, Doosan enhances its competencies as a global company through its own values and philosophy.

Creating a New Future beyond its 120-Year History.

Doosan, being the longest among Korean companies, has established the strength of its 120-year history. Since Doosan took its first step in 1896 when Park Seung-Jik opened modern store in Baeogae (currently located in Jongno 4-ga, Seoul), we have achieved dynamic and fast change and growth. The history of the current Doosan began as its name was changed from Park Sung Jik Store selling linen in 1946 into 'Doosan Store'. Doosan expanded its business scope to include beer and trading businesses, touching upon diverse business portfolios including construction, food & beverage, machinery and media, thereby catering to the changing demands of time. By making forays into overseas markets, Doosan diversified its business scope into categories such as information flow, living culture and technical materials, focusing on globalization, and thereby becoming a world-class company with sophisticated technologies.

Doosan has achieved changes and complete progress by passionately discovering new growth engines from 2000 onwards. Doosan acquired companies at home and abroad, which possess source technologies or have huge synergies with its existing businesses, thereby managing 25 domestic affiliates and 121 overseas subsidiaries. Driven by proactive advancement into overseas markets, 64% of Doosan's total revenues come from abroad (as of 2015).

Doosan will seek for continued changes without being complacent about its performance thus far. Doosan aims to grow into a global enterprise standing alongside customers by providing differentiated products and services which can imbue a sense of trust and self-pride to customers.

Vision

Doosan envisions to be one of the global top 200 companies by 2020, executing people-centered management, the source of global competitiveness, and setting a global standard of business process.



Doosan Way

The Doosan Way is our belief and philosophy to build the 'Proud Global Doosan'.

The Doosan Credo

The Doosan Credo is a set of principles that represent Doosan's philosophies and our unique way of doing business. These principles have been the foundation of Doosan's success for the past century. The Doosan Credo consists of nine core values and is integral to every aspect of our businesses and people, clearly guiding our decisions and the way we do business. Through the realization of these values, Doosan accomplishes its ultimate goal. The Credo consists of Doosan's "Aspiration" and "Core Values".

*The Credo is a charter containing the unique value of Doosan on which all of our business activities and decision making should be based.

Aspiration

Doosan's ultimate goal is the creation of a 'Proud Global Doosan'. In our Vision, each of our employees and all of our stakeholders will benefit from, and be proud of their association with, Doosan. Every employee takes great pride in being a member of Doosan. Each customer recognizes and appreciates Doosan's high-quality goods and services. Every shareholder values our fair and high levels of profit.

Core Values

Doosan People practice the nine core values of the Doosan Credo everywhere we operate, every day, to build a "Proud Global Doosan". These values guide the way we do business, the way we treat each other and the way we work with all of our partners.

Strategy

Behind the success of Doosan is its unwavering 'trust in people'. People have been the foundation of our success for the past century and will help us build our next hundred years. Such trust in our people lies at the very heart of Doosan's management philosophy. Doosan's strategy is based on the principle of "2G" – Growth of Business by Growth of People. 2G is a virtuous circle in which people drive business growth, which in turn provides our people the opportunity for advancement. Doosan believes that sustainable success can only come through people.

Doosan People

Doosan's talents or 'Doosan People' refer to all its members who have capabilities and willingness to contribute to their organization irrespective of the quantum of caliber or talent possessed, and act on their willingness, while endlessly striving to upgrade their caliber. Doosan People are those who prioritize Doosan's fundamental values and vision for talents, and put them into action.

[Core Values of the Doosan Credo]

People
Cultivating People
Integrity and Transparency
Inhwa
Customers
World-class Technology and Innovation
Profit
Social Responsibility
Safety and Environment

[Traits of Doosan People]



Limitless Aspiration



Cultivating People



Inhwa



Open Communication



Tenacity & Drive



Prioritization & Focus

CEO Message



Dear stakeholders,

It is a great pleasure to share our CSR activities, performances and future plans of Doosan E&C with our stakeholders through this report.

Doosan E&C has fostered competencies by endlessly challenging itself for the new, and transforming crises into opportunities since its foundation in 1960. Examples of our outstanding projects are: the 300m-high Haeundae Doosan We've The Zenith with 80 floors, which is Korea's highest residential building; the longest contract extension for express railways in Korea; and Sinbundang Line, Korea's first private-sector proposed railway project involving the Doosan Engineering & Construction Consortium. Doosan E&C is able to tout its presence as it is today, thanks to its commitment for corporate social responsibilities throughout its management activities.

A company that grows alongside people

We believe that long-term corporate growth is made possible mainly by the people. We manage a nurturing system in a virtuous structure where people's growth becomes the basis for corporate growth, which, in turn, provides opportunities of growth to individuals. We establish a corporate culture that respects human rights and diversity, implements actions to create a secure working environment and considers people as the top priority in value judgments throughout corporate activities.

A company that puts the top priority on customers

Doosan E&C practices 'principle-based management' based on proper ethical awareness, by considering honesty and transparency as top corporate values. We make unwavering efforts to secure innovative products, sophisticated technological prowess and differentiated fundamental competitiveness in order to provide the outstanding value that satisfies customers.

A company that fulfils its social responsibilities

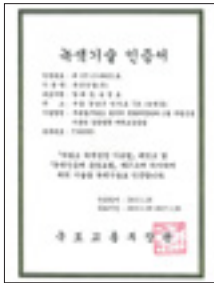
We are aiming for the mission of 'Enhancing Future Competitiveness of Communities and Corporate Value through Strategic Social Contribution Activities'. Therefore, we strive to contribute to community development by fundamentally resolving social issues in ways we can exert our strengths rather than by confining such activities to helping out the underprivileged and doing charity work alone.

Doosan E&C makes the utmost efforts to realize the vision of 'Infra Solutions Provider That Makes the World a Better Place' through endless changes and innovation. We will do our best to comply with the UNGC's 10 key principles and pursue shared growth with all stakeholders. I would like to thank our stakeholders for their continuing interest and support for Doosan E&C.

Thank you.

President & CEO of Doosan E&C **Byung-hwa Lee**

Highlights in 2015



01 Acquiring Green Technology Certification and Designation as the New Excellent Technology of Construction

Doosan E&C was given the green technology certification No. GT-15-00021 by the Ministry of Land, Infrastructure, and Transport on January 29, 2015 with the 'disk connector method between steel pipe pile and concrete footing foundation using no-welding/no-bolt-type connecting disk and the L-type main reinforcement bar'. The disk connector method is frequently used on civil engineering sites where extremely simple steel bar fixing units are used to minimize the construction work. The technology enables work time to be reduced by about 60% from 35 minutes to 14 minutes, and the load strength to increase by 1.5-2.3 times, while construction cost is reduced by 38% at least. We were able to gain additional points which will be valid for PQ review in the future by our efforts to reduce CO₂. The efforts can reduce CO₂ generated from welding by 1,724.8kg (equivalent to the effect to planting 129 30-year-old larch trees), and the welding fume by 3.731kg based on 200 piles. This technology was designated the New Excellent Technology of Construction No. 768 by the Ministry of Land, Infrastructure, and Transport on July 10.



02 Winning Pohang-Samcheok Railway Construction Project

The Civil & environmental BG won an order to construct railway roadbeds and tunnels for work zone 17 of the Pohang-Samcheok railway construction project, which is the last construction section of the railway. This project is scheduled to be constructed with a total length of 15.16km from Geundeok-myeon to Sajik-dong in Samcheok City, and includes six bridges (total 1.1km) and nine tunnels (total 9.5km), requiring a high level of technological prowess. Doosan E&C with the longest contract extension for express railways in Korea, has further established its leading railway construction skills and records in Korea.



03 Winning the Best Prize at the Best Practice Award for Safety and Health Activities in Construction

The Chung-Ang University Building 310 Site won the best prize at the 'Best Practice Award for Safety and Health Activities in Construction' held in COEX on July 9. The award was organized by the Ministry of Employment and Labor and hosted by Korea Occupational Safety Health Agency. It aimed to contribute to the prevention of industrial accidents by propagating best practices in initiating safety and health activities, and reducing the number of accidents on construction sites, marking the 48th Industrial Safety and Health Week. In this competition, Chung-Ang University Building 310 Site team presented their RULA safety management system which generates virtuous cycle of safety by enabling workers to work in a decent and clean environment with pleasure through organic cooperation with the headquarters based on the safety and health management policy.

Participating in the 25th World Road Congress

The Civil & environmental BG participated in the '25th World Road Congress' which is known as the Olympics in civil works and transportation, from 2nd November to 6th November promoting Doosan E&C's outstanding technological prowess and construction records. Doosan E&C's Gangnam beltway Zone 5 construction site was selected as the only site for the technical tour program, which provided an opportunity for us to promote Doosan E&C's outstanding technical skills to 120 international road experts for three days. In the paper and poster section, our paper on 'Single Anchor Bridge Bearing to Optimize Bridge Substructures' outperformed many other competitors to be posted in the section. It was a great opportunity to promote Doosan E&C's enthusiasm for technological development.

04



Upswing in the sale Volume for Ulsan Beonyeong-ro Doosan We've

05

Doosan E&C achieved a series of successes in the apartment sales in Seoul, Ulsan and Busan. Ulsan Beonyeong-ro Doosan We've which started to be available for subscription in Daehyeong-dong, Nam-gu in Ulsan from November 17 achieved 100% sold out. The apartment complex hit the highest subscription rate of a maximum of 145:1 or an average of 93:1. It has a total of 761 units with 8 buildings of B2 to 18F-27F. All units have the same size of 84m². The apartment complex has maximized not just the perfect lifestyle infrastructure, but also the view and openness with a long distance between buildings. A sufficient amount of green space with two large lawn gardens is also available. Occupancy is slated for September 2017.



Opening Subway Line Extension of Shin-Bundang Line (Jeongja - Gwanggyo)

The Subway Line Extension of Sinbundang Line (Jeongja - Gwanggyo) was opened with Doosan E&C participating as the underwriter for the private financing project. The total length for the extension of the line was 12.8km with one yard and six depots. It will be managed with an unmanned system equipped with real-time monitoring and a cutting-edge control system as is the case with the currently operating Shin-Bundang Line (Gangnam - Jeongja). When the subway line extension is completed, it is expected to improve traffic jam resulting from rapid population growth of Gwanggyo area by enabling to travel from Gwanggyo to Gangnam in a half-hour. With the total extension of 50km, additional projects for two sections - Yongsan - Gangnam (8km) and Gwanggyo - Homaesil (11km) - are ongoing besides the currently available Gangnam - Gwanggyo section.

06



Corporate Overview and Business Area

Internalizing Management and Accelerating Growth for Medium and Long-term Projects by Discovering New Growth Engines

Having accumulated sufficient know-how and technologies since its foundation, Doosan E&C is striking a balanced growth by diversifying portfolios through discovery of new growth engines. We will grow into the 'Infra Solutions Provider' by maximizing management/competency infrastructure and sophisticating core technologies.

Company Name	Doosan Engineering & Construction Co.,Ltd.		
CEO	Byung-hwa Lee	Date of Establishment	April 7, 1976
Head Office	726, Eonju-ro, Gangnam-gu, Seoul, Korea		
Business Area	Civil Engineering, Plants, Architecture, Residential, CPE ¹⁾ , HRSG ²⁾		
Employees	1,854 persons (As of the end of 2015)		
Construction Capacity Ranking	13 th (Valuation: KRW 2.4457 trillion)		

1) Decided on business transfer of the Chemical Process Equipment business in June 2016

2) Decided on business transfer of the Heat Recovery Steam Generator in May 2016

July, 1960

Established

June, 1976

Launches the El Shams Hotel Construction Project in Egypt (Korea's first entry into Egypt)

August, 1980

Constructed Saudi Arabia International Airport(PF-16)

April, 1985

Started the construction of Jungbu Expressway Zone 3

March, 1996

Wins the contract bid for the construction of Kyungbu High-Speed Railway (Zone 1-1) facilities

Total Assets

KRW **4,225.7** billion

Total Equity

KRW **1,414.3** billion

Sales

KRW **1,805.4** billion

Volume or Orders Received

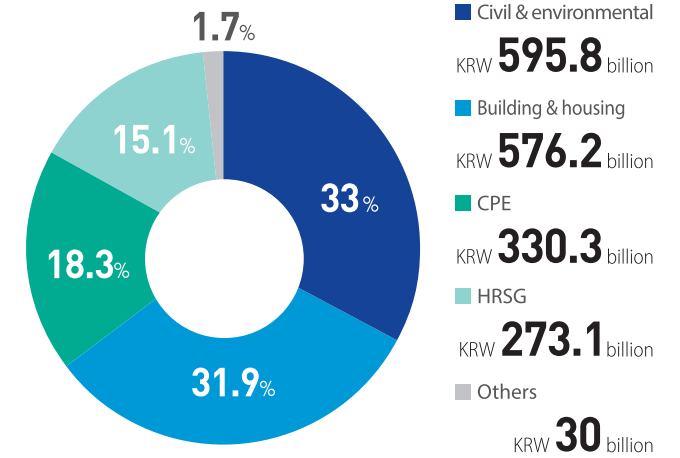
KRW **2,262** billion

Credit Rating³⁾

A3- (commercial paper)

3) Korea Ratings, NICE Investors Service

Revenues by Business



July, 1960

Established

June, 1976

Launches the El Shams Hotel Construction Project in Egypt (Korea's first entry into Egypt)

August, 1980

Constructed Saudi Arabia International Airport(PF-16)

April, 1985

Started the construction of Jungbu Expressway Zone 3

March, 1996

Wins the contract bid for the construction of Kyungbu High-Speed Railway (Zone 1-1) facilities

February, 2001

Launches the residential apartment brand, Doosan We've

May, 2004

Merged with Korea Industrial Development Company

May, 2010

Marked the 50th anniversary

November, 2011

Completes the construction of Haeundae Doosan We've the Zenith (Korea's tallest mixed-used building)

January, 2016

Opens the extended section of Shin Bundang Line from Jeongja to Gwanggyo

Doosan E&C

We continue to move forward to create a better future.

Having accumulated abundant know-how and technological prowess since our foundation in 1960, we are at the forefront of creating a better world by notching up outstanding feats in global infrastructure support.

Civil & Environmental BG

We are changing the map of Korea through historical changes in the area of civil works.

We conduct perfect design, construction and maintenance in all areas of civil works including express railways, subways, roads, bridges, landfills and port works. We spearhead the efforts to create a pleasant environment and an enriching future based on countless hands-on experiences in construction and technological prowess.

Building & Housing BG

We create a world-class construction culture with an unparalleled sense and technologies.

World-class buildings are borne out of top-tier technologies combined with an outstanding artistic sense. We create artistically invaluable spaces by adding creativity based on advanced technologies, changing the world into a beautiful world in a unique style.

Chemical & Power Equipment BG

Core chemical engineering equipment in oil and gas plants, core CPE in gas-fueled combined cycle power plants and HRSG (Heat Recovery Steam Generator) CPE

We tout the largest order volume awarded in Korea for chemical process equipment (CPE) products in the ultra-large and large scale. Our HRSG with a unique model named 'D-Top' was ranked first* in the global HRSG market share for five times in 2003, 2007-2009 and 2013.

* Source : McCoy Power Reports 2014

CSR Strategy

A company grows along with the society it does business in. Doosan E&C is creating sustainable corporate and social values while seeking for economically, socially and environmentally harmonious development based on three CSR strategic directions: developing people, reliable operation reliable operating and responsible engagement.

CSR Strategy System

Doosan's CSR strategy system aims to achieve the goal of 'Becoming a Leader in CSR in the World by 2020' by realizing the vision of 'Proud Global Doosan', which consists of 3 CSR strategic directions and 7 top priority tasks.



Organizations

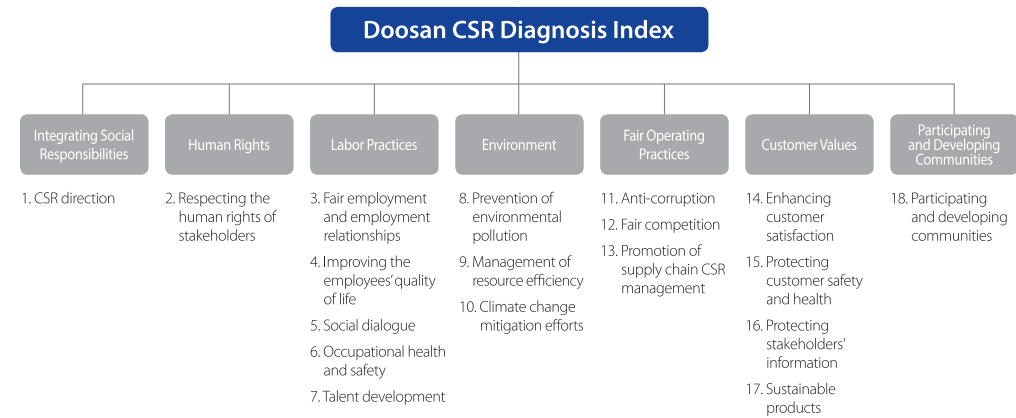
We run the CSR Committee to cater to internal and external stakeholder needs and fulfill social responsibilities emphasized in the Doosan Way. The biannually held committee is attended by the CEO as the chairman of the committee, the COO, the CFO, heads of each BG and division, and executives in seven areas. It is a decision-making body to review issues and business risks in areas selected by sharing and diagnosing results of CSR diagnoses, discuss responsive strategies and check out business performances in each area.



CSR Diagnosis and Evaluation

Doosan E&C annually reviews the current CSR status and potential issues in the 'Plan-Do-See' perspective after launching the CSR strategy system in 2013. We use Doosan CSR indicators to review the level in each sector and discover tasks for improvement, thereby continuously strengthening CSR activities. Besides the self-diagnosis, we gained the rating of B⁺ in 2015 in the ESG Evaluation of Korea Corporate Governance Service, which is conducted for domestically listed companies.

Korea Corporate Governance Service's ESG evaluation results



Performance of Activities in Each Sector and Mid and Long-Term Tasks

As a result of the current CSR status in each sector in 2015, tangible performance was shown in all sectors including the management of the CSR Committee and implementing core tasks. It was the first year to implement four core tasks: establishing a system to manage human rights risks, managing energy efficiency in business sites, strengthening the CSR management system for the supply chain and intensifying safety/health for suppliers. We were able to establish directions and management infrastructure for tasks, by identifying the current status within business units and analyzing issues. We will continue to manage it by sophisticating the tasks through the CSR Committee, reviewing performances and devising measures for improvement.

Sector	Key Tasks	Key Activities and Performance	Mid and Long-Term Tasks
Integration of Social Responsibilities	• Strengthening activities of the CSR Committee	• Managing the CEO-led CSR Committee and checking issues • Reviewing activity performance and improvement plans	• Reflecting CSR risks and opportunities in management strategies
Human Rights	• Establishing a system for managing human rights risks	• Conducting an awareness survey on human rights within business units • Initiating result-based improvement activities	• Checking human rights issues for stakeholders • Checking and facilitating communication channels
Labor Practices	• Strengthening safety/health support for suppliers	• Running training academies such as Safety Innovation School • Consulting on EHS for suppliers	• Expanding targets for safety/health in suppliers
Environment	• Establishing an energy efficiency management system on business sites	• Complying with environmental laws which are more stringent than those at the statutory level • Reviewing on investment for higher energy efficiency on business sites	• Reinforcing company-wide climate change response strategies for the medium and long term
Fair Management Practices	• Strengthening the CSR management system in the supply chain	• Establishing the CSR evaluation system for suppliers	• Strengthening activities to prevent potential risks in fair transactions
Customer Values	• Strengthening information security for stakeholders	• Intensifying training for higher awareness regarding information security • Upgrading the monitoring for a department handling personal information in the company	• Building up a mindset for information security for apartment subscription offices/sites
Community Engagement and Development	• Evaluating the contribution level for each social contribution activity	• Gathering needs of recipient institutions (targets) by region, and reflecting them in social contribution activities	• Establishing and measuring social contribution performance indicators



Responsible Engagement

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Compliance with the
United Nations Global
Compact









ESG Evaluation



Global
CSR Roll Out

Stakeholder Engagement

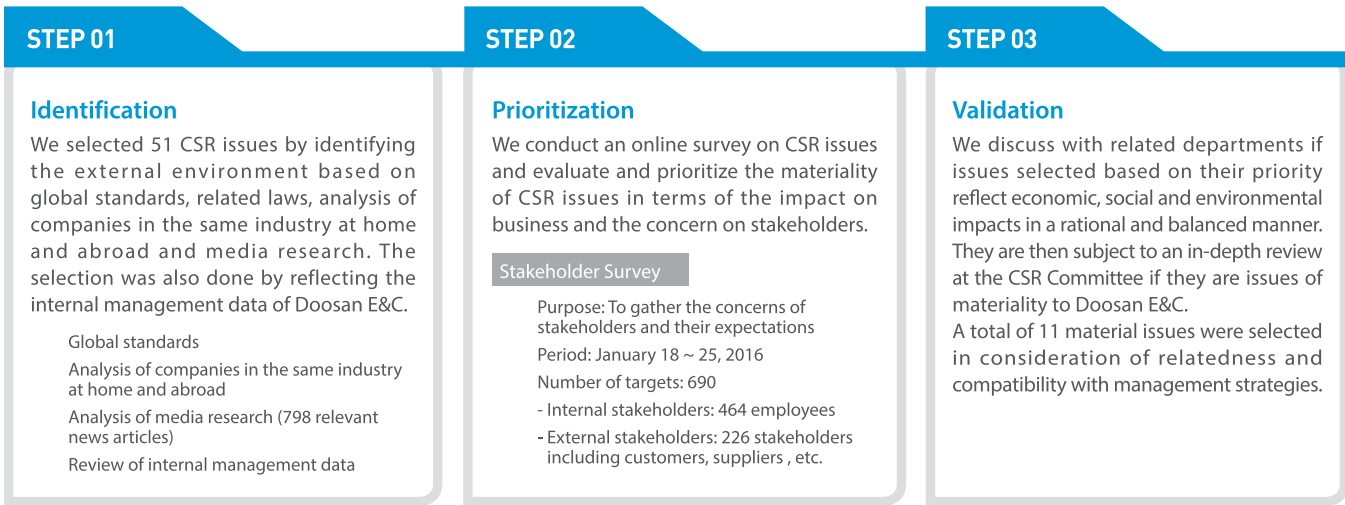
Doosan E&C has classified diverse stakeholders critically impacting its business, or critically impacted by management activities into customers, employees, shareholders and investors, suppliers, community and government/academia. We create an environment where stakeholders can freely voice their opinions. We also dynamically communicate with stakeholders through diverse channels, and the feedback gathered is reflected throughout in all management activities.

Major Stakeholders	Communication Channels	Material Issues in Report
 Customer	<ul style="list-style-type: none">• Customer Call Center• Customer Satisfaction Survey	<ul style="list-style-type: none">• Activities for quality innovation for higher customer satisfaction
 Employees	<ul style="list-style-type: none">• Conversations with the CEO• Meetings• Employee Survey• Labor-Management Council	<ul style="list-style-type: none">• Securing employment stability• Management of occupational accidents and disasters• Protection of human rights
 Shareholders and Investors	<ul style="list-style-type: none">• General Shareholders Meeting• Annual Report• IR Presentation• Brochure	<ul style="list-style-type: none">• Diversifying economic value creation through business expansion• Creating and distributing economic values
 Suppliers	<ul style="list-style-type: none">• Shared Growth Council• Workshops• Regular Meetings	<ul style="list-style-type: none">• Supporting and evaluating environmental management and industrial safety, etc. of suppliers
 Local Communities	<ul style="list-style-type: none">• Community Meetings• Social Contribution Activities	<ul style="list-style-type: none">• Making social contributions with consideration of community needs
 Government and Academia	<ul style="list-style-type: none">• Government Councils• Regulation and Evaluation	<ul style="list-style-type: none">• Complying with laws and strengthening anti-corruption training and institutions• Response to Climate Change and environmental pollutant emissions• Eco-friendly construction and design

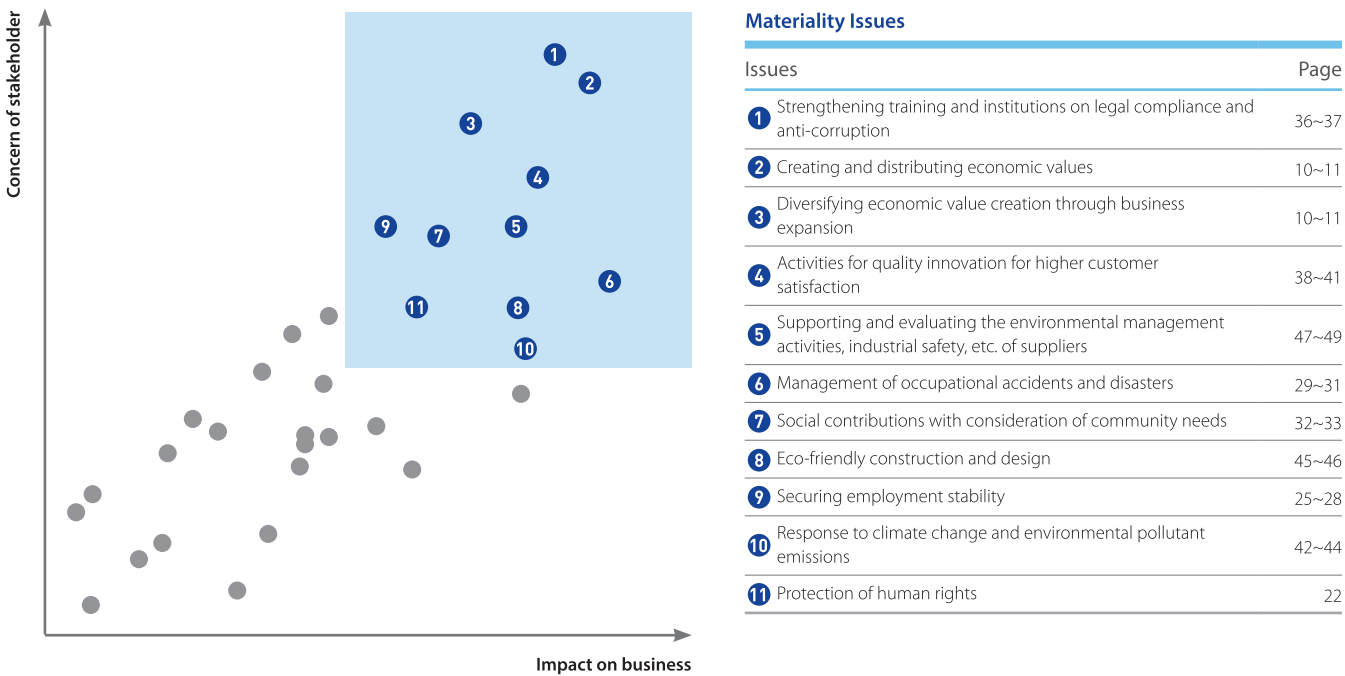
Materiality Test

Doosan E&C conducted a materiality test on urgent and key CSR issues to be considered in management activities among the areas of interest for stakeholders. The materiality test was based on the ‘impact on business’ and the ‘concern of stakeholders’ as recommended by the GRI G4 Guidelines

Materiality Evaluation Process



Materiality Test Results



Material Issues

Material Issues			Goals	Mid to Long-Term Tasks	2015 Results	2016 Plans
Developing People	Respect for Human Rights	• Protection of human rights	• Protecting human rights and preventing the infringement of human rights	• Establishing a system for managing human rights risks	• Analyzing the current status of human rights in the company, and establishing a process to handle human rights issues • Forming the internal Human Rights Committee • Defining human rights and reviewing regulatory revisions	• Conducting human rights related FGIs • Continuously improving the system
			• Spreading the culture of respecting human rights	• Managing institutions and programs to improve awareness about human rights of employees	• Conducting human rights training • Promoting human rights related institutions • Conducting a survey on human rights awareness	• Expanding targets for human rights training • Promoting related institutions and programs, and expanding and improving communication channels • Continuously conducting surveys on human rights awareness
			• Gathering stakeholder feedback to guarantee the basic labor rights	• Facilitating communication channels related to the basic labor rights	• Organizing the Labor-Management Council meetings • Organizing the Field Manager Council meetings • Launching the Ombudsman box and handling grievances	• Regularly organizing the Labor-Management Council , etc. • Improving and facilitating communication channels
	Talent Development	• Securing employment stability	• Developing specialized skillful talents	• Strengthening job expertise and enhancing job execution capabilities • Building up knowledge on job execution in the company and establishing a sharing system	• Enhancing the participation rate in learning by 7% through smart learning	• Adopting additional customized technical training for business sector
			• Developing global talents	• Implementing systems for improved global competencies • Supporting self-driven global competency build-up	• Expanding available language courses	• Expanding specialized language courses • Expanding targets for training (employees' family)
			• Enhancing work efficiency through customized training for each position	• Enhancing basic competencies through training suited to each position	• Realigning training courses for new employees - Expanding field training - Adding experience-based training on safety	-
			• Establishing a routine evaluation/development culture and sophisticating the system	• Enhancing employee's understanding of People Program (institutions for development/evaluation) • Establishing a culture of development through job execution	• Monitoring the progress rate of development/evaluation • Sending the HR Guidelines to establish and evaluate the nature of their development through job execution • Sharing best practices for their development for each BG	• Improving the evaluation system • Expanding the 'job execution-based development' based on the Functional Competency system
			• Managing and improving programs to support retirees	• Collecting requirements of employment transfer applications • Continuously improving programs	• Jobs acquired for approximately 76% of employment transfer program participants	• Continuously improving programs
	Safe Work Environment	• Management of occupational accidents and disasters	• Improving the management of the safety and health program	• Advancing the EHS program	• Applying improvements made in the safety and health program - Customized training for each position	• Making improvements based on analysis of continued effectiveness of safety and health programs
			• Gathering stakeholder feedback on the safety and health program	• Devising safety and health policies and gathering feedback from program stakeholders	• Gathering feedback based on the awareness surveys	• Making improvements and applying improvements made by gathering stakeholder feedback
			• Supporting suppliers to establish and improve on safety and health polices	• Diagnosing safety and health of suppliers	• Strengthening applicability through program feedback	• Securing effectiveness through policy improvements
	Sharing Activities	• Social contribution in consideration of community needs	• Activities of Public Interest for the Community	• Planning and executing programs of public interest for the community	• Increase of 21.4% in the number of people donating blood as compared to the previous year in the <Blood Donation Campaign>	-
			• Improving the dependency on the community	• Planning and executng programs to improve on the dependency of community	• Strengthening competencies for self-sufficieny and vocational rehabilitation	• Expanding the recipient targets
Reliable Operating	Ethical Management	• Strengthening training and institutions on legal compliance and anti-corruption	• Increasing awareness about the Code of Conduct among employees	• Establishing infrastructure for ethical management as employees internalize the Code of Conduct	• Conducting training on the Code of Conduct for employees - Completion rate: 84.2%	• Raising the completion rate for training on the Code of Conduct - Completion rate: 90% or higher
	Strengthening Accountability for Products and Services	• Activities for quality innovation for higher customer satisfaction	• Maintaining the ISO 9001Certification	• Strengthening awareness of quality management through reinforcement of employee training	• Conducting internal quality audits • Conducting education and training	• Maintaining and continuously improving the quality system
			• Enhancing quality through technical standardization	• Reducing the number of defects through technical standardization	• Analyzing major claims among customers • Adopting technical standardization to prevent five types of construction defects	• Continuing with technical standardization against defect prevention
			• Strengthening actions on safety for personal information protection	• Strengthening the monitoring system for the use of personal information • Training on the protection of personal information	• Laying the foundation for system-based monitoring of personal information	• Strengthening adequacy inspection for the use of personal information • Inspecting safety in the system of handling personal information
	Environmental Management	• Response to Climate Change and environmental pollutant emissions	• Adopting policies and rules on climate change in EHS strategies	• Establishing a guideline on GHG regulations	• Devising a manual on energy and resources management	• Conducting a campaign to save GHG
			• Establishing a system for managing information on GHG emissions	• Establishing the GHG inventory and increasing personnel in charge	• Establishing a database on GHG emissions	• Setting up and stabilizing the IT system for GHG inventory
	Eco-Friendly Construction and Designstrategy	• Eco-friendly construction and design	• Developing engineering-based technologies and products with price competitiveness	• Securing eco-friendly technologies and strengthening cost competitiveness	• Applying the New Excellent Technology of Construction, extending the protection period, and completing the green technology certification	• Initiating new excellent technology of construction for securing source technologies and having green technologies certified
			• Expanding the scope of the application of new and renewable energies	• Developing technologies using new and renewable energies	• Conducting monitoring for three sites besides Cheongdam-dong hotel	• Expanding the number of sites where new and renewable energies are applied
	Shared Growth with Partners	• Supporting and evaluating the environmental management activities, industrial safety, etc. of suppliers	• Establishing policies and measures for shared growth	• Planning policies and measures for shared growth and devising measures for improvement	• Improving the quality of shared growth programs and policies - Using the standard subcontracting contracts, etc.	• Settling shared growth based on continuous improvement of activities and expansion
			• Establishing a process for monitoring and feedback on shared growth programs	• Establishing a process for monitoring and feedback	• Strengthening monitoring for fair trade and establishing a feedback process - Establishing the CSR evaluation system for suppliers, etc.	• Strengthening a long-term partnership by continuously reflecting and initiating supplier needs



Developing People

Human Rights	22
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Annual Average Hours of Training per Employee

39.3 hours



Industrial Injury Rate

0.29%



Number of Hours Spent on Volunteering in a Year

5,866 hours

Human Rights

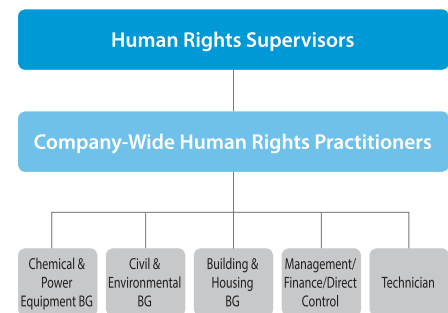


Doosan E&C maintains stable and sound labor-management relations by ensuring the basic labor rights of employees and establishing a smooth communication process. Also, we strive to respect the diversity of our employees by implementing various support systems for female and foreign workers, and production workers who are continuously increasing.

Goals	Mid to long-term Tasks	2015 Results	2016 Plans
Protecting human rights and preventing the infringement of human rights	• Establishing a system for managing human rights risks	• Analyzing the current status of human rights in the company, and establishing a process of handling human rights issues • Forming the internal Human Rights Committee • Defining human rights and reviewing regulatory revisions	• Conducting human rights- related FGIs ¹⁾ • Continuously improving the system
Spreading the culture of respecting human rights	• Managing institutions and programs to improve awareness about human rights of employees	• Conducting human rights training • Promoting human rights-related institutions (screen saver, Intranet) • Conducting a survey on human rights awareness	• Expanding targets for human rights training • Promoting related institutions and programs, and expanding and improving communication channels • Continuously conducting a survey on human rights awareness
Gathering stakeholder feedback to guarantee the basic labor rights	• Facilitating communication channels related to the basic labor rights	• Organizing the Labor-Management Council meetings • Organizing the Field Manager Council meetings • Launching the Ombudsman box and handling grievances	• Regularly organizing the Labor-Management Council and the Field Manager Council meetings • Improving and facilitating communication channels

1) Focus Group Interview

Human Rights Committee

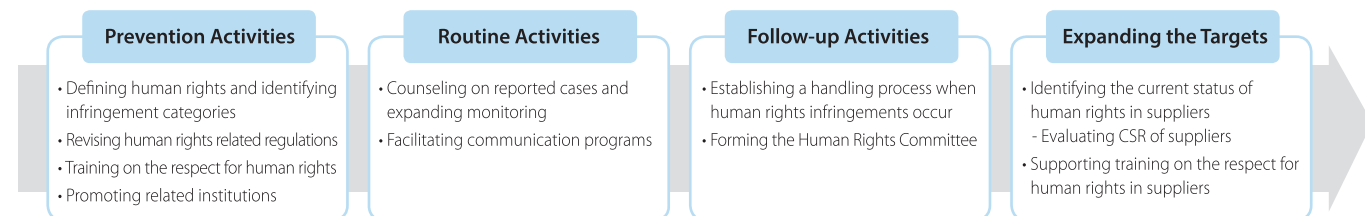


Protecting Human Rights and Preventing the Infringement of Human Rights

Amid the growing social interest on human rights along with more stringent international norms, we seek to prevent potential risks while protecting the human rights of stakeholders surrounding Doosan E&C, through systematic management of related institutions. We create a favorable working environment where employees are respected without unfair discrimination, while practicing human rights-centered management focusing on the dignity and value of human beings and ensuring that all employees are aware about human rights.

Current Status of Human Rights and the Prevention Process

We conducted interviews by selecting focus groups with a high likelihood of risk occurrence by infringement type. We also reviewed categories to be intensively managed in organizations, by identifying the level of awareness of human rights, and by collecting infringement cases based on employee surveys on the awareness of human rights. We devised a management system to protect human rights and prevent overall risks on human rights.



Spreading the Culture for the Respect for Human Rights

We conduct various human rights respect programs to change the awareness of employees, and improve the corporate culture based on the human rights risk management system.

Training on the Mindset for Respect of Human Rights

We conduct training on developing and maintaining a favorable mindset for respect of human rights to form consensus among employees on human rights, and to understand accurate definitions and narrow the scope of understanding and thoughts among one another. Training on human rights conducted in 2015 for employees at the headquarters, covered the concept and necessity of human rights, types and cases of human rights infringements in workplaces, an action guideline for human rights protection, the internal reporting process when human rights are infringed and introduction to human rights-related institutions and programs. Routinely promoted are the screensaver, the concept of human rights through the quarterly newsletter, infringement types and cases and how to report and seek for counseling. Human rights training will be expanded to not only sites and plants at home but also to overseas sites.

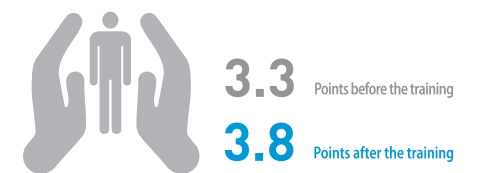


Mindset Training on the Respect for Human Rights

Conducting a Survey on Awareness of Human Rights

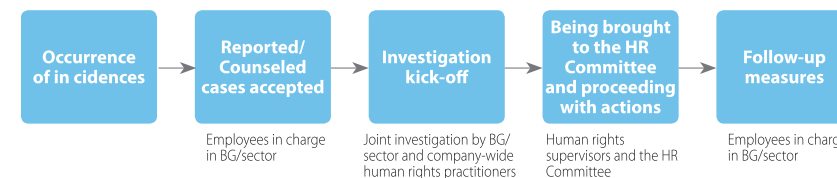
We conduct a survey on awareness of human rights to avoid one-way communication and to listen to the voices of employees clearly. We ease their burden on communication by listening to anonymous feedback, and take their genuine thoughts and opinions, which will be used to improve institutions and programs. We will continue to conduct surveys to identify elements on the level of human rights management, and the human rights violations to be focused on, and to devise measures to make improvements in the future.

Survey on the Awareness of Human Rights (Five-Point Scale)



Human Rights Handling Process

We have put in place the human rights handling process to receive and resolve cases reported on human rights damage as well as to counsel on their human rights. We have improved the existing reporting and counseling channels to raise the awareness level which is currently low. We have also routinely promoted related institutions and programs. We improve the process by imagining ourselves in their situation in order to ease their communication burden and to increase their trust.



Major Human Rights Institutions and Programs

Institutions and Programs	Content
Adjusting the time of arrival/departure for employees who are working mothers	• Participation rate of 17% in 2014 and of 8% in 2015
Supporting childcare	• Running in-house childcare centers for five year old preschoolers
Managing job positions with flexibility in time	• Recruiting women whose career has been disrupted (12 hires in 2014,7 hires in 2015)
Recruiting the socially underprivileged	• Recruiting the disabled and patriots and veterans (12 hires in 2014, 9 hires in 2015)

Human Rights

Gather Stakeholder Feedback to Guarantee the Basic Labor Rights



Wage Agreement Signing Ceremony

Guaranteeing Freedom in Union Activities

Our collective bargaining agreement entails protection of union activities, principles of collective bargaining, and reporting of and information on strikes. Stipulated clauses describe free union activities for the labor rights of union members. Workers’ subscription rate for the labor union is 6.8% in building & housing (Gosan), 0.7% in building & housing (Doosan), 97.4% in plant equipment (CPE) and 55.4% in plant equipment (HRSG). A total of four labor unions are in operation.

Labor-Management Council

The Labor-Management Council is held quarterly to discuss the respective roles of each party on an equal footing, corporate development, guarantee of workers’ rights and welfare enhancement. Approximately 10 agenda items were gathered including upward adjustment of summer vacation bonuses and facilitation of the use of remaining leave. They were reflected in institutional improvement and management activities. The council plans to maintain and improve cooperative relationship between the Labor and the Management by regularly organizing it.



Field Manager Council

Field Manager Council

The Field Manager Council, which is mostly attended by field supervisors who directly manage and supervise sites, contributes to achieving production goals by stabilizing sites and devising measures for improving them. The Field Manager Council, which is held once a month, discusses opinions on ways to improve irrational work procedures, safety facilities, production facilities, and welfare facilities. Site workers can suggest ideas for improvement and monitor the results to upgrade work environments centered on sites and workers.

Grievance Handling System

We strive to guarantee basic rights for employees and to create a stable working environment for work efficiency. We devised the Ombudsman Box to strengthen communication channels offline. The box was placed in a cafeteria in the company to ease the burden of communication and create an environment for free suggestions on grievances. In 2015, 19 suggestions were accepted and handled. Doosan E&C seeks a better quality of life for employees by proactively gathering demands of employees and by implementing relevant social changes.

Major Proposals	Handling Results
Expanding welfare infrastructure (shuttle buses, etc.)	• Launching new shuttle bus routes (routes in Buk-myeon) • Raising summer vacation bonuses (KRW 400,000 → KRW 500,000)
Requesting for work uniforms reflecting job features	• Providing work uniforms for welding operators, boiler makers and molding engineers
Lacking parking space for bikes in plants	• Increasing bike parking space in the second half of the year
Facilitating employees to use remaining leave	• Notifying plans on taking leave in early 2015, and implementing group leave at the year-end
Placing hand sterilizers for MERS prevention	• Completing the placement of hand sterilizers in offices and bath-rooms on each floor and in shuttle buses

Talent Development



The growth engine that will lead the future of Doosan is ‘People’. Also, investments on talents will enhance the company’s sustainable growth and value competitiveness. Doosan has a passion for developing people. Above all, it is important to develop talented staff, who realize our goal of ‘Proud Global Doosan’, and strengthen their competencies.

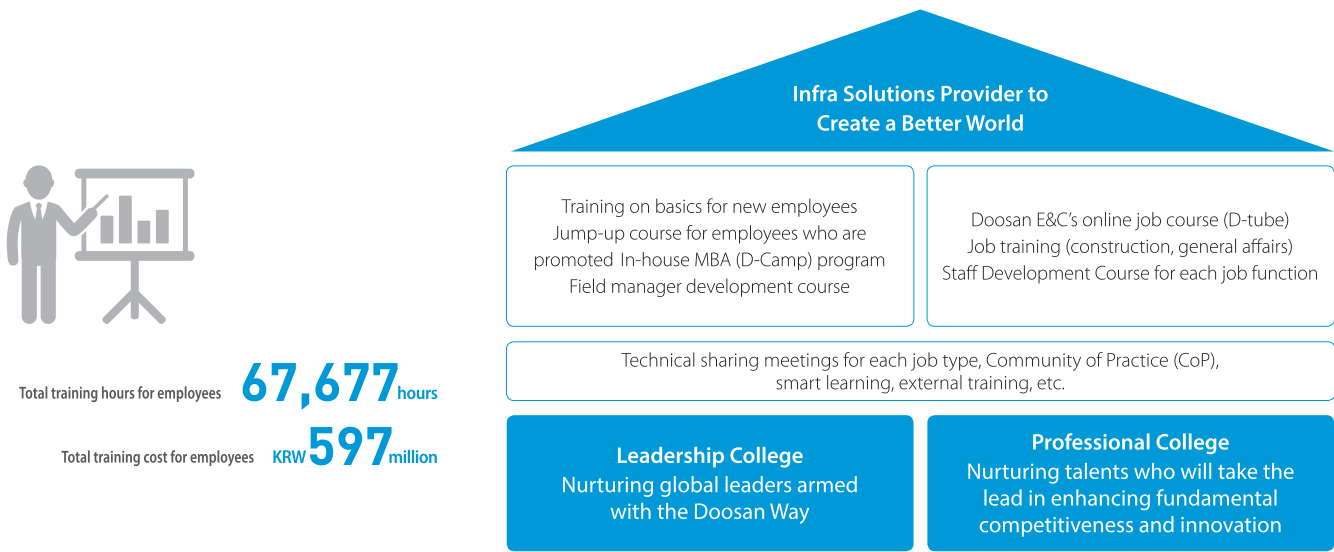
Goals	Mid to long-term Tasks	2015 Results	2016 Plans
Developing specialized skillful talents	• Strengthening job expertise and enhancing job execution capabilities • Building up knowledge on job execution in the company and establishing a sharing system	• Enhancing the participation rate in learning by 7% through smart learning	• Adopting additional customized technical training for business sector
Developing global talents	• Implementing systems for improved global competencies • Supporting self-driven global competency build-up	• Increasing language courses	• Expanding specialized language courses • Expanding targets for training (employees’ family)
Enhancing work efficiency through customized training for each position	• Enhancing basic competencies through training suited to each position	• Realigning training courses for new employees - Expanding on-site training - Adding hands-on safety training	-
Establishing a routine evaluation/development culture and sophisticating the system	• Enhancing employee’s understanding of People Program (development evaluation of institutions) • Establishing a culture of development through job execution	• Monitoring the progress rate of development/evaluation • Sending the HR Guidelines to establish and evaluate a culture for development through job execution • Sharing best practices for development for each BG	• Improving the evaluation system • Expanding ‘development through job execution’ based on functional competency system
Managing and improving programs to support retirees	• Collecting requirements of employment transfer applications • Continuously improving programs	• Jobs acquired for approximately 76% of employment transfer program participants	• Continuously improving programs

Based on the Doosan Credo of ‘HR Development is the Priority of All Investments and Everyone’s Obligations’, Doosan E&C is striving to develop ‘Proud Global Doosan’.

Talent Development

Doosan E&C's Talent Development System

Doosan E&C is mainly operating two categories of HR development systems. The first is the Doosan Leadership College, which is a training program in stages, for developing global leaders embedded with the Doosan Way and improving their own individual competencies. The second is the Doosan Professional College, which is a job-oriented training program that aims to develop professionals for each field, by strengthening fundamental competitiveness and conducting innovations by improving actual capabilities.



Smart Learning System

We manage the smart learning system which enables learning using smart devices regardless of time and space, in consideration of the characteristics of the construction industry where employees work all over the nation. The system enables them to take courses on job functions and competencies, and languages voluntarily and systematically. The participation rate among employees has increased by 7% from the previous year.

Creating a Culture for Self-Driven Learning

We manage the 'Learning Credits' to nurture talents equipped with leadership and expertise in job functions. 'Learning Credits' are self-driven learning courses where employees plan and execute their learning based on their roles and levels.

The Staff Development Course in another form of self-driven learning, which is opened and managed by learners themselves. The course is to upgrade functional competencies, as learners gain knowledge and practice from external instructors or internal specialists with expertise and lecturing skills. Courses are open and shared in training courses by teams or business units by utilizing a system set up in e-Doosan University (an integrated learning portal website), which is used as a ground for sharing knowledge and experiences.

Developing Technical Talents

We manage the two-track training system, a training path to nurture specialized technicians to help them serve as in-house technical specialists. Believing that skillfulness of technical workers is the fundamental competitiveness for the company, we have established necessary knowledge and skills needed for job performance in each organization and for each individual. The track is divided into two i.e. field leaders and technical specialists (meister). Doosan E&C was awarded the gold prize at the 23rd Construction Craft Contest due to its systematic support for nurturing technical experts and for individual efforts of technicians.



Winning a Prize at the Construction Craft Contest

System for Nurturing Technical Workforce		
Field Leader Path	Basic/Core competency course	Common course
	Course for promoted personnel	Promoted personnel course I (Technical assistant manager)
		Promoted personnel course II (Technical assistant manager)
	Field leader course	Field leader course I (part leaders)
		Field leader course II (part leader candidates)
Technical Expert (meister)	WS for personnel who have completed the first year	Common course
	Maestro development course	Common course
	Technical faculty development course	Common course

Dual Mentoring Program for Technicians

We run a dual mentoring program accompanied by senior technical and office workers for new employees joining as technicians to help them acquire job skills and better adapt to their organization. The program was conducted for six months, providing opportunities for mentees to form broad interpersonal relationships and settle in their work early, and for mentors to enhance their leadership skills and acquire new knowledge and skills. Participants are maintaining and developing the mentor-mentee relationships and voluntarily contribute to fostering new employees after the mentoring program is over.

Major Welfare Systems

Work & Life Balance	Extending support for overseas backpacking trips, summer holidays (financial support), refresh leave and vacations of congratulations and condolences, gifting on anniversaries, and support for in-house club activities
Childbirth & Childcare	Managing childcare centers/women's lounges (lactation rooms) and sponsoring tuition fees
Stabilization of Housing & Livelihood	Providing housing rental fees, housing costs for transfers to other regions, dormitory service and financial support for occasions requiring congratulations and condolences (funeral services, financial support/leave for occasions requiring congratulations and condolences)
Medical & Healthcare Benefits	Sponsoring medical fees and the medical check-up, subscription to group accident insurance and flu vaccination, and operating fitness centers and providing a free access
Others	General legal advice, compensation for long service, gifts for special holidays, shuttle buses, and International SOS (24/7 medical and security support for overseas business trips of employees)

Talent Development

Fair Evaluation and Compensation for Talent Management

Type	Doosan Competency Model (DCM)	Management by Objectives (MBO)
Items	Employees' individual competencies as attributes (a competency model reflecting the talent vision internalized in Doosan Way)	Level of achievement for individual financial/strategy goals every year
Targets	Employees who worked for the company for more than three months	
Period	December - March	December

Fair Evaluation and Compensation Based on a Genuine Interest and Development

We identify areas of individual strengths of employees and determine where development is needed based on a fair and rational fact-based evaluation. We manage a process aligned with evaluation and development so that all employees can voluntarily focus on self-development and activities to nurture their competencies. We support them to help them grow as leaders in line with the Doosan Way as well as 2G Strategy¹⁾ of Doosan.

1) 2G Strategy: A system to nurture employees in a virtuous structure by serving as the basis, where the growth of people becomes the growth of business, which, in turn, provides growth opportunities for individuals

Establishing a Culture for Routine Evaluation/Development and Sophisticating the System

We establish a routine development culture by improving the method of managing the People Program (Doosan E&C's development/evaluation system) in order to internalize the Doosan Way and live accordingly. Support and monitoring takes place for activities, so that development and evaluation is made seamless on site. The People Letter is sent on a monthly basis to establish a job-based development culture, providing guidance on development. Meetings are held to share best practices on development in each business group (BG), and to discover and spread diverse development activities, which can be utilized in practice. We plan to strengthen specialized functional competencies for each sector by establishing a functional competency system, and enabling specialized development activities for their job functions and roles.

Strengthening Programs for Retirees

As Korea has become an aging society, there has been a greater interest in post-retirement life, including the extension of the retirement age and the development of the silver development. We initiate making policies and taking actions to help employees maintain a sense of economic, psychological and social stability after they retire.

Type	Key Content
Extension of the Retirement Age	Extending the retirement age up to the age of 60 Introducing the wage peak system earlier than the statutory timeline (to be mandated by 2016)
Retirement Pension	Introducing the wage peak system earlier than the statutory timeline (to be mandated by 2016)
Support for Retirees	Funeral service support (3-year) Health check (or child tuition fee) support (3-year) Management of the program for employment transfer

Employment Transfer Supporting Program

We run a support program to help employees that are being transferred to adapt to a new environment and start their new life. The program provides consulting, training, an office space and OA devices for applicants for 6-12 months for their re-employment and start-up. In 2015, the program helped approximately 76% of the total applicants to be successfully reemployed and start a new business. We plan to continuously run the program, so that pragmatic training and support can take place, by taking as much of the feedback of trainees as possible.

Safe Work Environment



We devise and initiate continued improvement plans for all risks which hamper the environment/safety/health of workers to realize humanism-oriented management.

Our Vision : Global EHS Leader
Our Mission : Zero Serious Disasters / Zero Environmental Accidents
Our Value : Supporting Continued Growth of Effective EHS

Goals	Mid to long-term Tasks	2015 Results	2016 Plans
Improving the management of the safety and health program	• Advancing the EHS program	• Applying improvements made in the safety and health program - Customized training for each position	• Making improvements based on analysis of continued effectiveness of safety and health programs
Gathering stakeholder feedback on the safety and health program	• Gathering the stakeholder feedback on safety and health polices and program	• Gathering feedback based on the awareness survey	• Making improvements and applying improvements made by gathering stakeholder feedback
Supporting suppliers to establish and improve on safety and health polices	• Diagnosing safety and health for suppliers	• Strengthening applicability through program feedback	• Securing effectiveness through policy improvements

Improving the Management of the Safety and Health Program

Expanding the Targets for the Safety Innovation School

We conduct safety management training by expanding the targets of the Safety Innovation School to suppliers, which is up and running as a part of the EHS Upgrade. An eight-hour training session was conducted three times by starting a course for site managers of suppliers. For high-risk handling supervisors for safety line works and temporary scaffolding installation and demolition, the training was offered four times.

Training on EHS Experiences for the Management

In order to enhance the safety awareness of the management including the CEO, we provided experience-based training on safety, environment and health. Training based on theory was offered in a virtual safety experience zone, and training was also provided on cardiopulmonary resuscitation and the prevention of musculoskeletal disease. The safety awareness of the management was strengthened through hands-on experiences of personal protective gear including safety belts for fall-off prevention.

Tuesday Lecture on EHS

We conducted the Tuesday Lecture on EHS to enhance the awareness of safety and health among employees. EHS intensive training was conducted on themes such as EHS leadership, risk management, inspection and emergency every Tuesday.

Completion of the Safety Innovation School (Accumulated)	
Management Course	25 persons
On-site Supervisor Course	59 persons
Management Supervisor Senior Course	180 persons
Management Supervisor Junior Course	139 persons
Safety Manager Course	183 persons
Course for Employees of Suppliers	158 persons



Safe Work Environment

Gathering the Stakeholder Feedback on the Safety and Health Program

EHS Forum for Suppliers

We run the EHS Forum for Suppliers to spread information on the EHS Upgrade plans and to enhance the safety awareness, and strengthen suppliers' EHS competencies. The forum is in operation for CEOs of suppliers, and our institutions were improved by reflecting feedback on the safety rewards, the two strike-out system and the supplier evaluation system.



EHS Forum for Suppliers

Implementing the EHS Management Committee

We share the company-wide current status of EHS and issues involving it by managing the EHS Management Committee. The committee announced BG-specific disaster status and countermeasures against reoccurrence, and discussed management plans on high-risk sites. We also shared ideas on creating an atmosphere for safety culture, performances of the first half of 2015 and improvement in managing safety personnel. We also discussed strengthening EHS competencies of suppliers and establishing fundamental countermeasures against accidents.



EHS Management Committee

Conducting Safety Manager Council Meetings by Area

We conduct area-wise quarterly meetings for the Safety Manager Council by dividing nationwide sites into six in order to exchange information and resolve issues on EHS. Agenda for each area were suggested in advance to conduct discussions, and activities took place to share issues by site and find solutions. Information on EHS was shared, which was significantly helpful in sharing the safety awareness among safety managers.

Activities for Improving EHS Systems

We formulated and revised the regulatory protocol and the business manual to respond to and improve the EHS system for employees and suppliers, and enhance the execution capabilities of EHS policies. The environmental management regulations, and the safety and health environment regulations for 2014 were integrated into the EHS Management Regulations, and 27 EHS provisions were integrated into 20 provisions. Moreover, 13 business manuals were re-classified into 42 manuals, paving the way for better accessibility and enhancing the policy execution capabilities for 2015.

Converted Accident Ratio (Domestic Construction Projects)



Establishing and Supporting to Improve Safety and Health Policies for Suppliers

Supporting Programs for Safety and Health for Suppliers

We manage the EHS consulting programs by visiting suppliers to prevent EHS issues for them and strengthen their EHS competency. Specifically, we establish EHS management measures and transfer EHS management experience to them, provide the EHS guidelines and safety and health manuals, provide EHS training support and materials, and share EHS best practices and the safety white book. In 2015, we visited major suppliers, transferred our EHS corporate management system, and took necessary actions to coordinate on matters where improvement was needed on sites. The scope of support is going to be expanded to include not only competent suppliers, but also those with a high likelihood for accidents to occur, strengthening the safety and health support program.



EHS Consulting by Visiting Suppliers

EHS Academy

We manage the EHS Academy to raise awareness of site managers in suppliers and high-risk work managers/supervisors. Courses cover scaffolding work and safety line work whose fall-off frequency is comparatively higher. The training was evaluated to have been helpful for them to strengthen their core competency and knowledge acquisition on EHS.

EHS Academy Course

Targets	Target Criteria	Scale of Personnel	Training Program
Site Managers in Suppliers	<ul style="list-style-type: none">• Site managers in suppliers which conduct construction in each BG at Doosan E&C• Construction work<ul style="list-style-type: none">① Reinforced concrete work② Steel installation and assembly work③ Earth work (tunnel, bridge, structure, port)④ Architectural work (painting, stone work, curtain wall)⑤ Other work (safety facilities, Mechanical Electronic Plumbing (MEP), demolition work)	90persons	<ul style="list-style-type: none">• EHS competency buildup course- Developing risk prediction capabilities for each scenario and establishing countermeasures- Having awareness of basic training on EHS
Dangerous Work Managers	<ul style="list-style-type: none">• Team director for dangerous work where each BG conducts construction at Doosan E&C• Dangerous work<ul style="list-style-type: none">① Scaffolding, installation/demolition work (fall-off and destruction risks)② Safety line work (fall-off risks)	56persons	<ul style="list-style-type: none">• Qualification Course- Qualification for major work

Sharing Activities



In order to grow into a sustainable company, it is necessary to fulfill the social responsibilities through close communication and ties with the society. Doosan E&C is contributing to the development of local communities by conducting social contribution activities under the mission to achieve ‘Enhancing Future Competitiveness of Communities and Corporate Value through Strategic Social Contribution Activities’.

Goals

Activities of Public Interest for the Community

Improving the Dependency on the Community

Mid to long-term Tasks

• Planning and executing programs of public interest for the community

• Planning and executing programs to improve on the dependency of the community

2015 Results

• Increase of 21.4% in the number of people donating blood as compared to the previous year in the <Blood Donation Campaign> , which helps in the treatment of children with pediatric cancer

• Strengthening competencies for self-sufficiency and vocational rehabilitation
- Adolescents with disabilities: 12.5 points up on average

2016 Plans

-

• Expanding the recipient targets

Activities of Public Interest for Community

Individuals who Donated their Blood Donor Certificate



2015 **181** persons

2014 **149** persons



Seoul Forest Tending

Giving Hope to Pediatric Cancer Patients

We sponsor outpatient medical fees and blood donor certificates in conjunction with the Korea Pediatric Cancer Foundation to correct social prejudice against pediatric cancer and help children with pediatric cancer, whose families have a financial struggle to get proper treatment. In 2015, we carried out a blood donation campaign twice a year for pediatric children struggling for blood donations amid the MERS outbreak, and 181 out of 230 participants donated their certificate after donation. The figure is up 21.4% from the previous year, which stood at 149. We will continue to increase the number of employees who donate their blood.

Seoul Forest Tending

We initiate customized activities at Seoul Forest, an iconic ecological park and recreational space for citizens in Seoul. We refurbished a playground in the forest for children and tended an aromatic garden replete with herbs for the visually impaired. We created a small garden within the forest by planting ground cover plants including big blue lilyturf, while removing dangerous plants around the waterfront for family visitors.

Improving the Dependency on Community

Dream Sharing – Mentoring on Career Paths

<Dream Sharing – Mentoring on Career Paths> is a mentoring program to help youngsters think about their dreams and future in order to map out their career path. For adolescents in facilities who are to leave there at the age of 18, we extend support so that they can upgrade their competencies for self-sufficiency by acquiring a license. We also help them in writing their resume and personal essay along with a mock-up interview. For disabled adolescents, we provide training on basic office work including documentation and also offer barrister training and café management experiences. As a result of enhancing their affinity to their job and their competencies to execute it, the score for job competency and adaptability increased by 12.5 points.



Amount of yearly donations **KRW 237** million

Number of participating hours **5,866** hours

Number of yearly participants **2,051** persons

Habitat

Doosan E&C conducts the activity of Habitat, making the most of the ability and features of the construction business. The program is to provide houses to homeless families who are living in poor residential environments. ‘Doowooh’, an association of our employees and our suppliers with house building expertise, donated their talent by being involved in building houses on the Chuncheon site and Gwangyang site of Habitat. We have forged constructive ties with Habitat for Humanity Korea by suggesting construction methods that minimize material losses that might occur during construction.

Diverse Aspects of Doosan Day of Community Service

The Doosan Day of Community Service is a day of volunteering for Doosan People to fulfill corporate social responsibilities, which is one of Doosan Credo's core values. Employees were engaged in activities of sharing, by looking out for community building activities including talent development, protection of the natural environment and labor service with 950 employees in the first half of 2015 (participation rate of 30%) and 628 in the latter half (23%).



<Habitat> to Provide Houses to Homeless Families



Dream Sharing – Mentoring on Career Paths



<Making Solar Windmill Houses> - Science Class for Children



Charity Bazaar with a Local Childcare Center



To Support Physical Development of Infants and Babies




Doosan Vina Haiphong, <Hoa Phuong Childcare Center Remodeling>

Reliable Operating


Ethical Management	36
Strengthening Responsibility for Products and Services	38
Environmental Management	42
Eco-Friendly Construction and Design	45
Shared Growth with Partners	47






Number of Training Hours
on Code of Conduct

3,200 hours



GHG Emissions

45,526.80 tCO₂e



Amount of Procurement
by Suppliers

KRW **736.5** billion

Ethical Management



We establish a transparent and sound corporate culture by sharing proper ethical awareness among employees and stakeholders, in line with the management's strong will for ethical management.

Goals

Increasing Awareness about the Code of Conduct Among Employees

Mid to long-term Tasks

• Establishing infrastructure for ethical management as employees internalize the Code of Conduct

2015 Results

• Conducting training on the Code of Conduct for employees
- Completion rate: 84.2%

2016 Plans

• Raising the completion rate for training on the Code of Conduct
- Completion rate: 90% or higher

Ethical Management System

Code of Conduct

We seek to enhance corporate competitiveness and fulfill corporate social responsibilities through harmony among members, customer-oriented management philosophies, and transparent management and innovation for continued growth and development. Therefore, we created a Code of Conduct based on integrity and transparency, which applies to all business activities of our employees. We encourage our partners to follow this Code of Conduct.

Responsible Organization

The Legal Affairs Team and the Audit Team, which were selected as major business units for ethical management are in operation for employees to conduct fair and transparent corporate activities. The Legal Affairs Team is responsible for formulating and interpretation of the Code of Conduct and employee training. The Audit Team runs its self-audit and in-house program to enhance the ethical awareness among employees. As such, we strive to be reborn as a transparent enterprise through continued activities for integrity.

Establishing Infrastructure for Ethical Management

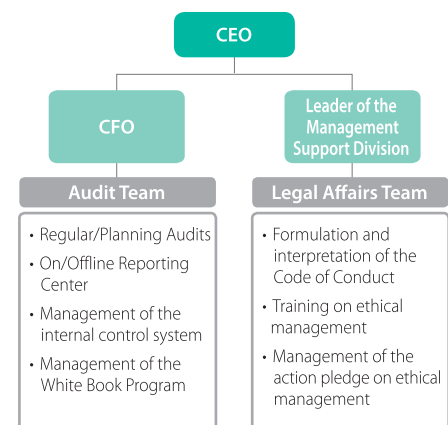
Internal Control System

After we adopted the internal control system in 2006, we have been making continuous efforts to achieve management goals by maintaining an accurate and reliable financial reporting system, guaranteeing effective and efficient job execution, and complying with related laws and internal policies.

White Book Program

We implemented the White Book Program in 2014 to analyze fundamental causes for matters that are internally and externally reported, and major issues that occurred in the course of carrying out business, and come up with improvement measures. We put fundamental causes and improvement measures for key issues into quantifiable data, and strive to prevent the occurrence of similar problems by reflecting them onto internal training and review.

Business Units for Ethical Management



Cyber Reporting Center

Doosan E&C runs the Cyber Reporting Center to receive reports on unethical behavior of executives and staff which include taking bribes, unfair performance, and corruption. The reporter's information is strictly protected and the report is treated quickly in accordance with the standard procedure. The results are informed to the reporter and also shared with all employees through the White Book Program in order to prevent reoccurrence and to raise the awareness of business ethics.

Ethical Management Activities

Taking a Pledge to Conduct Ethical Management

All employees take a pledge to conduct business ethics, while writing the stakeholder statement which is compulsory for members above the level of team leaders and site manager. In addition, we conduct an anonymity-based survey evaluating transparency of employees and job handling standards, thus intensifying ethical management.

Conducting Employee Training on the Code of Conduct

We conduct cyber ethical training, a workshop on the Code of Conduct and ethical training with executives in charge for all employees. They are presided over by the Legal Affairs Team for employees to internalize the Code of Conduct. In 2015, 1,350 employees completed ethical training for 3,200 hours in total through cyber ethical training and the workshop.

Legal Training for Site Managers



We conduct training on legal issues that might frequently occur on sites through leadership sessions and site manager meetings based on Doosan Way Leader Guidebook, which is published to support site managers.

Operating Guideline for the Cyber Reporting Center



Doosan Cyber Reporting Center is open to all employees and non-employees. Cases that are eligible to be reported include violations of internal regulations including Doosan Way and the Code of Conduct and other unfair acts.



Reporting can be done anonymously or by providing the name. However, there may not be any investigations on anonymous reporting where no specific evidence has been suggested.



Confidentiality is guaranteed on the credentials of a reporter and the content, and there is no disadvantage against reporters of good will.



Reporting of employees is subject to our internal reporting rules, which can be guided by the DooDream or a department in charge.



We accept reporting in various channels including mail, phone, fax, e-mail and offline visits to the department in charge besides reporting to the Cyber Reporting Center.

Management of the Cyber Reporting Center



Doosan E&C's Cyber Reporting Center
<https://ethicshelpline.doosan.com/>



2014 **74**cases
2015 **94**cases

Training on the Code of Conduct for Employees

Number of individuals who completed the training



1,350persons
Completion rate
84.2%
Number of hours for training
3,200hours

Strengthening Responsibility for Products and Services

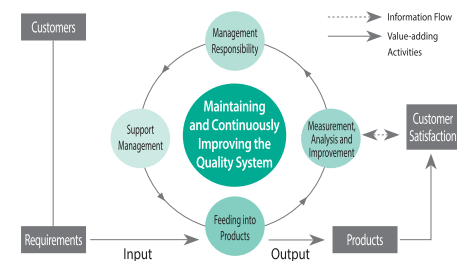


Doosan E&C is striving to secure fundamental competitiveness and acquire advanced technologies and innovative products, to provide excellent standards of value that can satisfy our customers.

Goals
Maintaining the ISO 9001 Certification
Enhancing Quality through Technical Standardization
Strengthening Actions on Safety for Personal Information Protection

Mid to long-term Tasks	2015 Results	2016 Plans
• Strengthening awareness of quality management through reinforcement of employee training	• Conducting internal quality audits • Conducting education and training	• Maintaining and continuously improving the quality system
• Reducing the number of defects through technical standardization	• Analyzing major claims among customers • Adopting technical standardization to prevent five types of construction defects	• Continuing with technical standardization against defect prevention – Follow-up on the performance of 2015
• Strengthening the monitoring system for the use of personal information • Training on the protection of personal information	• Laying the foundation for system-based monitoring of personal information	• Strengthening adequacy inspection for the use of personal information • Inspecting safety in the system of handling personal information

Quality Management System Process



Quality Management System

Management of the Quality Control System for Customer Satisfaction

We apply a management system for actionable and specific construction quality assurance from the point of site opening to transfer of deliverables through the ISO 9001:2008 certification, in order to respond to customer demands with distinctive quality. We initiated the standard document alignment and conversion for the revised ISO 9001:2015 in order to respond to changes in the international quality standard.

Quality Assurance Activities for Approval of Customers

We have expanded quality assurance activities to offer bigger values and greater impressions to customers in the form of products. To this end, we conduct internal quality audits for all sites and plants, and manage quality assurance processes and training programs for site managers and quality managers, thus maintaining a high level of quality. Thanks to quality assurance activities for each rank in business units, customer complaints have dropped for the past three years.

Technological Competitiveness through Continued Technology Development

We continue to develop technologies for construction including a method to prevent a spalling phenomenon in high-strength concrete, a technology to improve the structural safety of buildings, and development of crack-reducing concrete for a longer shelf life of structures and cement substitutes. As a consequence, we strive to secure safety, eco-friendliness and quality of building structures constructed by Doosan E&C.

Green Technologies and New Excellent Technology of Construction Designated in 2015



Efforts for Better Quality

Securing Fundamental Competitiveness

In order to cater to customer demands and minimize quality defects, we analyze the types of major defects on domestic construction sites, and conduct preemptive quality control activities based on sophisticated technologies. We spearhead the quality level of domestic construction sites by providing construction standardization technologies, which even cater to the potential desire of customers.

Developing Talents in Quality Control and Training Best Practices in Quality

We have expanded the quality control talent development program (Quality Academy) to strengthen quality control activities of all ranks including site managers, supervisors and quality control managers, and have developed quality control personnel. Defects found during the construction process are subject to corrective action, by immediately conducting training on all sites, so that no similar defect is liable to reoccur later. Causes for defects and countermeasures against reoccurrence are registered in the site portal system and made available so that on-site staff are able to immediately utilize them in their work.

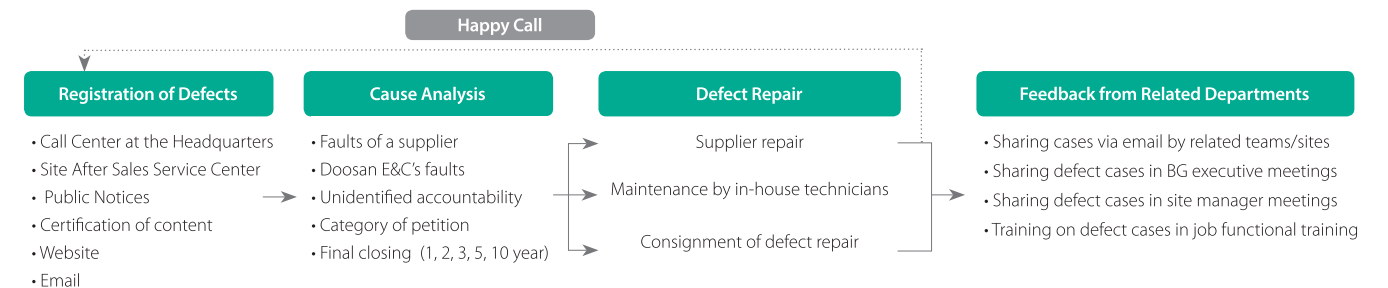
Sophisticating the Management System for Product Monitoring

We upgrade the construction quality level and efficiency in quality improvement by supporting newly opened sites to improve their quality, autonomously driven by competitive technologies on quality and specialized workforce. As a consequence, we were able to prove our quality competitiveness at the ‘Evaluation of Adequacy of Quality Control in Construction Companies’ conducted by the Ministry of Land, Infrastructure, and Transport in 2015. We gained less than a half of the average penalty points of the top ten construction companies.

Customer Services

Follow-up Management Service

Doosan E&C’s present and future lie alongside their customers. We enhance quality by listening to VOC through various channels and mulling over improvements to be made. The Customer Service Team promptly and efficiently handles customer claims that occur on sites, by creating a database on materials for customer satisfaction and quality, and strives for continued quality improvement by reflecting them onto future projects.



Workshop for Fundamental Competitiveness of Site Quality Control Managers



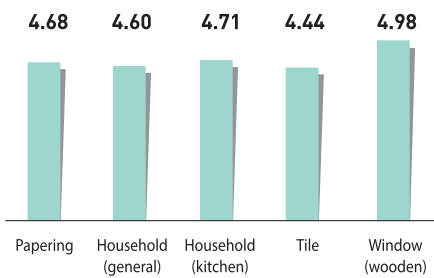
2015 Quality Academy
(Training on the Quality Management System)

Strengthening Responsibility for Products and Services

Creating a Database on Customer Claims

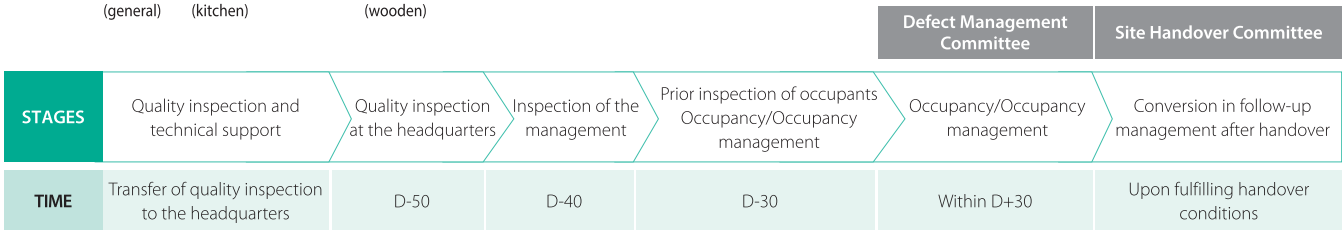
Customer claims are categorized into a database by process and type of work, and the occurrence rate of major defects is analyzed and gradually improved. We accumulate data on construction techniques and materials that might differ per site, and review them while executing similar projects over the long term in order to provide better outcome in quality.

Satisfaction Level for Defect Handling (5-Point Scale)



Quality Management Beyond Follow-up Management

We provide systematic services ranging from pre-occupancy quality control activities to support for occupancy and post-occupancy complex management, and prompt defect repair in order to provide best products and services. A five-step quality inspection is conducted for each site. Quality inspection took place for the Ansan Choji apartment reconstructed in 2015 (108 cases), Pangyo composite development (83 cases) and two blocks of Cheongju GWell City (116 cases), totaling 308 cases where improvement was needed. The results are reflected in these sites and projects are slated for the future.



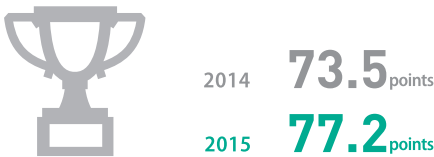
Conducting Technical Standardization

We prevent reiteration of the same defects based on analysis of major claims of customers and technical standardization. We standardized five construction categories on factory and shape of lumber based on technical standardizations in 2015. We plan to continuously improve the quality of products and services through additional analysis of construction types and defects.

Upgrading the Customer Satisfaction Survey and Service

For apartment sites, we have installed an occupant support center in the complex to raise accessibility for customers. For claimed cases that have been handled, the Happy Call service is operated to check the satisfaction level. As a result of the internal satisfaction survey in a five-point scale, we gained high points with 4.1 in 2014 and 4.08 in 2015. Externally, we acquired 77.2 points for KS-SQI of the Korean Standards Association, manifesting a high level of service by ranking seventh among domestic construction companies.

KS-SQI (Korean Standard-Service Quality Index)



Strengthening the Protection of Personal Information for Customers

We have steadily strengthened laws and regulations of the government and institutions to counter damage from the recent leakage of personal information of customers. We sophisticate the system for the protection of personal information of customers, employees, suppliers and site workers, and continue to conduct training for security system improvement and the protection of personal information for employees.

High level Security of Personal Information

Doosan E&C takes responsibility for security of personal information. As proof of our strong concern towards security of Personal information, we have set in place regulations, an inspection system, and a security system. We also run an education course to change concepts of employees regarding personal information.

Personal Information Management System

Doosan E&C manages its own regulations to protect personal information in accordance with relevant laws. An executive officer appointed by the CEO is responsible for the information management department. All departments that handle and manage personal information conduct quarterly self-inspection activities on matters of compliance and obligations, based on the standardized manual on personal information protection, which is in line with the internal control system of Doosan E&C.

Personal Information Protection System

We have established and manage a management system for the protection of personal information by devising yearly investment plans since 2011. We take systematic actions to secure safety of personal information against accidents. Such actions include managing systems for the encryption of personal information stored in the systems, and access control and track management of the database where personal information is recorded.

Personal Information Protection Training

Information security training is conducted on a yearly basis, which is managed as an essential course. In 2015, about 1,800 employees completed the information security course. Group training is conducted, which is led by a department in charge of information security for major establishments including sites, plants and housing subscription offices. Training is targeted at boosting security awareness among employees in specific job positions including site managers and subscription office managers. It also aims to imbue the criticality of protecting personal information of customers and also helps to keep the management measures in mind.

Environmental Management



GHG emissions have increased due to the use of fossil fuels and increased the threat from climate change by global warming. As such, we have established a responsive strategy system against climate change, and manage GHG emissions and the energy consumption in all sites.

Goals

Adopting Policies and Rules on Climate Change in EHS Strategies

Establishing a System for Managing Information on GHG Emissions

Mid to long-term Tasks

• Establishing a guideline on GHG regulations

• Establishing the GHG inventory and increasing personnel in charge

2015 Results

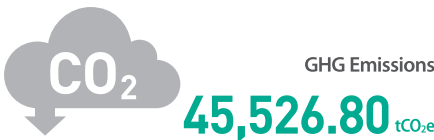
• Devising a manual on energy and resources management

• Establishing a database on GHG emissions

2016 Plans

• Conducting a campaign to save GHG

• Setting up and stabilizing the IT system for GHG inventory



Response to Climate Change

In order to dynamically respond to climate change, we are engaged in activities to manage GHG emissions and energy consumption. We implement diverse eco-friendly construction activities to reduce the amount of mixed waste, by having waste separated and stored by type and characteristic, which minimizes the environmental impact on construction work.

Management of GHG Emissions and Energy Consumption

We continuously compile GHG emissions and energy consumption on Changwon Plant 1 & 2 and the HRSG Plant as manufacturing sites. In 2015, established and managed a database by inspecting all sites for Civil & Environmental BG and Building & Housing BG as well as all buildings.

Activities to Reduce GHG Emissions and Energy Consumption

We ban idle usage of on-site construction vehicles and work equipment, and run them at an economical speed (below 20km/h on sites and at traffic speed limit on offsite). Lights are turned off during lunch break in on-site offices and headquarters buildings, and an appropriate temperature is set for each season (26℃ in summer and 20℃ in winter), while operating HVACs after closing entrances and windows. We are engaged in eco-friendly activities to reduce unnecessary energy consumption on all sites.

Reduction of the Environmental Impact

We strive to minimize the environmental impact on local residents and the surrounding ecosystem by complying with environmental laws. By conducting the environmental impact assessment prior to beginning construction, a project's impact on the environment – air, water quality, ecology, living environment, and the society and the economy – are investigated, predicted and assessed in advance. As a consequence, set up the plan to avoid or reduce negative environmental impact.

Prevention of the Occurrence of Scattering Dust

Doosan E&C installs automatic tire washers around the gates of construction sites to lower the occurrence of scattering dust, and appoints the personnel in charge of the environment management, thereby preventing the external discharge of the remaining sand from construction vehicles. Water is sprinkled on sites by operating water sprinkling vehicles, sprinklers and high pressure cleaners. We use river water for sprinkling and comply with environmental laws by acquiring necessary permits. We minimize the impact of scattering dust in the surrounding region by installing noise and vibration control houses in batcher plants – concrete making plants on some sites – and crusher plants.

Noise and Vibration Control

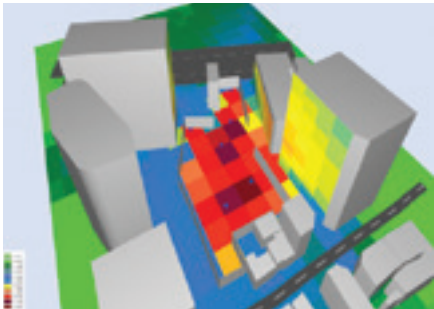
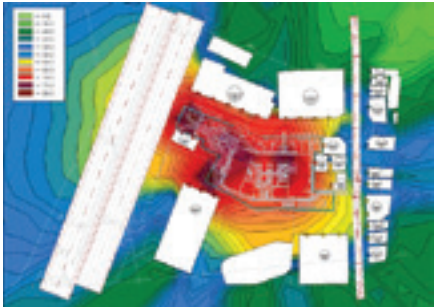
Doosan E&C is implementing measures according to the characteristics of each worksite to reduce noise and vibration, and are also complying with the regulatory standards set by the Noise and Vibration Control Act. In particular, our construction sites install noise barriers, mobile air domes and dust-proof and soundproof mats to reduce noise, and adjust working time for residents around the construction site. We also developed and applied to sites approved floor structure system from Ministry of Land, Infrastructure and Transport and the standard floor structure suited the standards of floor impact noise for a pleasant residential environment in apartments.

Water Management

We use the water from river and also develop and use the groundwater for residential water used for on-site offices and restaurants. We sprinkle water to reduce scattering dust on sites and during construction work. We review the suitability of water elements through water quality test while using the groundwater, and also periodically pay fees after getting approval and permit on the use of river water.

Wastewater Treatment and Management of Water Quality

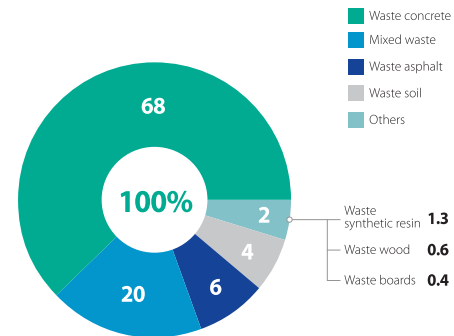
We are engaged in diverse activities to reduce water pollution and to minimize the environmental impact under construction. For instance, wastewater treatment facilities were constructed on sites, which treated wastewater from tunnel. We install individual sewage treatment facilities on sites to treat effluent from offices. Sites with a volume of wastewater of over 200m³/day are equipped with the tele-monitoring system (TMS), routinely sends the result data of the treated water to each local government, and which is used as basic data to establish environmental policies. The Temporary drain and sand basin, etc. are installed and operated to control non-point pollutant source. Silt protectors and oil fences installed to prevent the diffusion of muddy water on sites around river and sea.



Interpretation of the Noise Impact through Sound Simulation Prior to Construction

Environmental Management

Waste on Site



Waste Management

To reduce waste, Mixed waste is classify it by type and characteristic and stored in waste containers. We prevents water and soil pollution by wastewater from waste. Also, we check the management ability of waste treatment company by quarterly shop audit. Construction waste discharged in 2015 totals up to 84,978.43 tons in the order of the following: waste concrete with 68% (58,1563 tons), mixed waste with 20% (16,771 tons), waste asphalt with 6% (4,853 tons), waste soil with 4% (3,223 tons), waste synthetic resin with 1.3% (1,105 tons), waste wood with 0.6% (513 tons) and waste boards with 0.4% (354 tons). Waste wood is recycled into wood chips, pellets, etc., and some of them is either incinerated or landfilled due to the pine wilt etc.

Establishment of the Guide for Asbestos Disassembly

Asbestos of building materials contained in slates, ceiling panels and siding is designated as a Group I carcinogen because it causes lung cancer and lung diseases. Since 65% of public buildings use materials containing asbestos, asbestos needs to be systematically and securely managed while demolishing obstructions. Doosan E&C established the EHG Guide for Asbestos Disassembly to comply with EHG laws.

Activities for the Protection of Bio-Diversity

We seek to protect not only the ecosystem surrounding our sites but also the right to live in a pleasant environment for local residents. Thus, we investigate, predict and check the environmental impact assessment at initial stage of project and apply the result under construction. As such, we strive to minimize environmental damage. Sites located in ecosystem-protected zones or regions with a high value in biodiversity are engaged in various activities i.e. protecting and providing habitat and ecobridge for animals and supporting local environmental organizations.

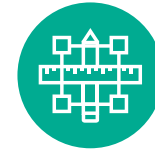
Purumi Campaign– Clean-up Activities

We regularly clean up rivers, roads, etc. around our sites. The military facility site of Doosan E&C in Baengnyeong Island cleaned up Natural Monument No. 392 - Kongdol Beach. As such, we carry out the clean-up activities at not only on-site but also off-site.



Purumi Campaign

Eco-friendly Construction and Design



Wide-ranging R&D takes place on new and renewable energies for eco-friendly construction. New and renewable energies are continuously developed, using pollution-free eco-friendly energy sources including solar and geothermal energies. We make unwavering efforts to develop buildings in consideration of both economic benefits and environmental values for buildings to be managed in an eco-friendly manner.

Goals

Developing engineering-based technologies and products with price competitiveness

Expanding the scope of the application of new and renewable energies

Mid to long-term Tasks

• Securing eco-friendly technologies and strengthening cost competitiveness

• Developing technologies using new and renewable energies

2015 Results

• Applying new excellent technology of construction, extending the protection period and completing the green technology certification

• Conducting monitoring for three sites besides Cheongdam-dong hotel

2016 Plans

• Initiating new excellent technology of construction for securing source technologies and having green technologies certified

• Expanding the number of sites where new and renewable energies are applied

Use of New and Renewable Energies

Geothermal Cooling and Heating System

The geothermal cooling and heating system uses the geothermal heat where there is almost no change in temperature throughout the year. It is an eco-friendly and economical system. It is categorized into two types: the open type where groundwater is directly used and the closed type with direct heat exchange. The system is applied to design after considering on-site conditions and efficiency. The closed-type geothermal system was designed and applied to Wolgye 4 Area and Incheon Gajwa Jugong Complex 2, and the open-type was applied to the College of Engineering Hall 1 at Yonsei University. The system is expected to be expansively used through continued research.



Geothermal Cooling and Heating System

Photovoltaic (PV) Power Generation

PV power generation is a technology to turn solar light energy into electric power, which consists of solar battery module and power conversion device. It is divided into PV¹⁾, a fixed PV generation type and BIPV²⁾, or Building Integrated PV, and is applied to design after considering the architectural design of the site and installation location, etc. PV was used for Wolgye 4 Area, Incheon Gajwa Jugong Complex 2, College of Engineering Hall 1 at Yonsei University and Banpo Catholic Church, while BIPV+PV was applied to Nonhyeon-dong hotel. We plan to apply it more continuously.

Fuel Cells

The fuel cell system is a new and renewable energy developed as new growth engines at Doosan E&C. It is a system that produces both electricity and heat at the same time using city gas without the emission of any pollutants. We apply PAFC³⁾ 400kW to the Chuncheon Training Center project and the Doosan R&D Center project where the electricity generated will be used as a base load for the buildings and the heat will be used as the source for cooling/heating and hot water supply. PEMFC⁴⁾ was applied to Seoul National University Hospital's BTL project for 50kW, I&C plant project for 10kW, Seoul University for 6kW and Gwangju Gyerim Section 5-2 for 600W. The electricity will be used as a base load for the buildings, and the heat will be used for pre-heating of hot water supply.



Fuel Cells: PEMFC

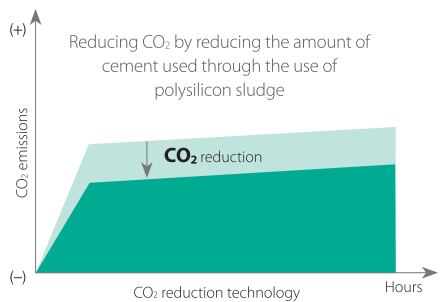
1) PV (Photo Voltaic)

2) BIPV (Building Integrated PV)

3) PAFC (Phosphoric Acid Fuel Cell)

4) PEMFC (Polymer Electrolyte Membrane Fuel Cell)

Eco-friendly Construction and Design



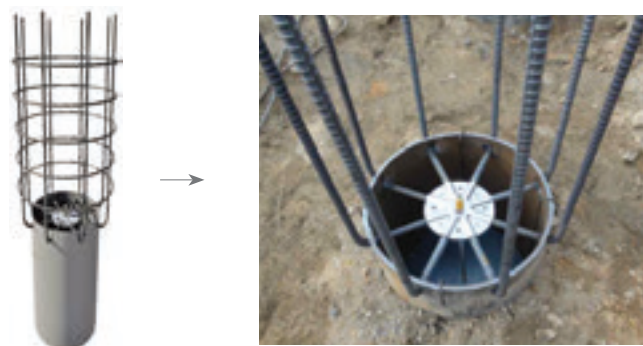
Development of Low Carbon Concrete Using Polysilicon Sludge

Use of cement is essential for concrete structures, and the cement industry takes up 18.9% in CO₂ emissions which is the second highest in all industries. In Korea, industrial byproducts including fly ash and blast furnace slag powder are used as substitutes for cement following efforts to develop cement alternatives for lowering CO₂. Yet, their usage scope is limited because the early strength of concrete tends to decrease.

We conducted a research where polysilicon sludge is used as an alternative material for cement because it has a high level of fineness and so is excellent in improving the early strength level. We have generated high performance including higher quality by recycling polysilicon sludge, ensuring CO₂ reduction effects and improving the early strength of concrete. Joint research is underway with Doosan Heavy Industries & Construction to maximize performance of developed products. We plan to carry out a research on product standardization for a wider use of polysilicon sludge.

Green Technology Certification

Doosan E&C was given the green technology certification for the connecting method between steel pipe pile and concrete footing foundation using no-welding/no-bolt-type connecting disk and the L-type main reinforcement bar. The disk connector method is used frequently on civil engineering sites where disk-type steel fasteners and the radially assembled L-type main reinforcement bar are used for super-simple steel bar fixing units. This speeds up the construction work, minimizes the number of processes, and excludes complicated installation work including welding and bolt assembly, while injecting processed reinforcement bar as a quick construction method. We were able to acquire the green technology certification by reducing CO₂ generated from welding by 1,724.8kg (equivalent to the effect to planting 129 30-year-old larch trees) and lowering the welding fume by 3.731kg based on 200 piles.



Application of No-welding / No-bolt-type Connecting Method Between Steel Pipe Pile and Concrete Footing Foundation Using the Connecting Disk

Shared Growth with Partners



We take utmost pride in forging a partnership with suppliers in the construction industry, where collaboration with suppliers is one of the critical strategies for global companies to grow. We are taking steps to establish a CSR system with suppliers based on the philosophy of shared growth– virtuous relationships with suppliers.

Goals	Mid to long-term Tasks	2015 Results	2016 Plans
Establishing policies and measures for shared growth	• Planning policies and measures for shared growth and devising measures for improvement	• Improving the quality of shared growth programs and policies - Using the standard subcontracting contracting, etc.	• Settling shared growth based on continuous improvement of activities and expansion
Establishing a process for monitoring and feedback on shared growth programs	• Establishing a process for monitoring and feedback	• Strengthening monitoring for fair trade and establishing a feedback process - Establishing a CSR evaluation system for suppliers, etc.	• Strengthening a long-term partnership by continuously reflecting and initiating supplier needs

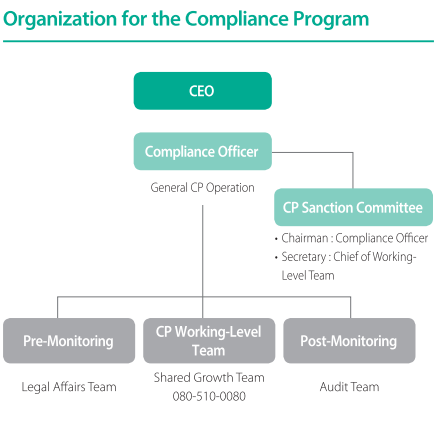
Compliance Program (CP)

Management of the Compliance Program (CP)

We run the compliance program (CP) for autonomous compliance with fair trade-related laws. We prevent losses resulting from legal violations, minimize penalties and enhance internal and external creditability on ethical management practices.

Use of the Standard Subcontracting Agreement

In order to prevent unfair special contracts, and generate fair trade practices in transactions with suppliers, we use the Standard Subcontracting Agreement for Construction and Landscape Planting produced and distributed by the Fair Trade Commission. By doing so, we strive to implement the philosophy of shared growth for Doosan E&C by fully guaranteeing suppliers' rights and creating conditions for shared growth of the contractor and its subcontractor. We plan to use the Standard Subcontracting Agreement more proactively, which is formulated and recommended by the Fair Trade Commission.



Compliance Program Operation in 2015

Type	CP Achievements	
CP Operation Policy	• Report to the BOD on CP achievements of the first half of the year	• Collection of written pledges on the CP from all executives and staff
Support by the Top Management	• Notice on the CEO's message about CP	• Event to declare suppliers' CP adoption
Education Programs	• Education on subcontracts to site and plant employees • Training by external experts	• Entrusted training on fair trade (internal transactions, etc.) • Cyber training on CP
Pre-Monitoring	• Monitoring of violations of subcontract laws for suppliers	• Inspections on the compliance with the Subcontracting Act at worksites and plants
Sanction and Incentive	• Awards to exemplary employees in CP / Reflection of CP achievements in MBO	
Evaluation and Improvement of the CP	• Education and survey on CP recognition	

Shared Growth with Partners

Support for Shared Growth of Suppliers



Activities of the Management care System

Projects to Support Suppliers

Given the nature of the construction industry where diverse suppliers are organically connected to one another, initiating shared growth to make greater values for the entire supply chain has become not an option but a must. We establish a win-win culture through various supporting activities for suppliers, while striving to establish relationships with fair and transparent transactions. We also seek for continuous win-win development.

Area	Projects Supported	Targets (scale)	Key Content
Finance	P-CBO	4 companies	• Issuing bonds subject to underwriting for competent suppliers and extending secured loans
	Network Lone	Applicant Companies	• Extending loans at a preferential interest rate for suppliers through the Agreement among Banks
	Industrial Innovation Movement 3.0	Approximately 20 companies	• Providing consulting to suppliers through the contribution of government funds, supporting equipment replacement
Training	Training for developing competencies for the working-level staff in suppliers	180 employees a year	• Consigning training to specialized institutions on the Framework Act on Construction Industry and the Subcontracting Act
	Training on transfer of large enterprises' management know-how	Over 60 employees a year	• Conducting training by professional instructors in areas in need of suppliers (labor, quality, safety, accounting, etc.)
Management	Support Group Helping to Build Competitiveness	38 companies	• Dispatching our specialists in quality, safety and production to suppliers, providing consulting and technical and management guidance on each sector
	Management care System	13 companies	• Consulting on business management and administration for six months by inviting specialized management specialists in the Korea Chamber of Commerce and Industry
Welfare	Health check-up	Applicant companies	• Discounting 55% for the health check-up for employees of suppliers in conjunction with Chung-Ang University Medical Center
	Improving welfare facilities		• Providing a dormitory for foreign workers for suppliers on Changwon Site • Providing a fitness center and a lounge for employees of suppliers

Rewards to Excellent Suppliers



Strengthening Partnerships with Suppliers

Rewards to Excellent Suppliers

We select outstanding suppliers with capabilities in the fields of construction performance, and safety and quality management capabilities, and offer them diverse benefits including negotiated contracts. We reaffirm partnerships with them through domestic and overseas training. As such, we do the utmost to form partnerships with suppliers in a virtuous cycle.

CEO's Visit to Suppliers

Doosan E&C's CEO and top management select and visit plants of promising small and medium-sized suppliers to observe their product manufacturing process. We put in all efforts for their development by holding meetings with them and reviewing measures to support them to meet their needs and execute them.



Doosan E&C's CEO Visiting a Supplier

Supporting Suppliers with CSR Management

Declaring the CSR Guideline for Suppliers and Managing the CSR Management Support Group

Seeking for sustainable and balanced development, we continue to conduct CSR activities. In order to strengthen self-sufficient capabilities and secure global competitiveness, we have declared the CSR Guideline for Suppliers which is aligned with the UNGC's Ten Principles. We also provide systematic consulting to suppliers that are willing to comply with them through the management support group for CSR, striving to strengthen their competitiveness.

Establishing the CSR Evaluation System for Suppliers

We give extra points to suppliers that follow the CSR Guideline we have declared, starting from the 2016 Supplier Evaluation. We leverage the CSR management support group consisting of experts so that, diverse training programs are made available for suppliers that are willing to comply with the CSR Guideline.



Activities of the CSR Management Support Group for Suppliers

Interview with Doowooh

We have reflected on the past activities of Doowooh which marks its 10th anniversary in 2016. The following is a summary of the interview with them.

Q1. How was Doowooh formed?

'Doo' in Doowooh came from 'Doo' in Doosan E&C and 'Woo' from 'Woosu (meaning 'excellent' in Korean)' suppliers. In 2007, 36 companies selected as the best companies, got together for a reward trip to Southeast Asia and agreed to form an association amongst themselves. Membership is confined to companies that have been in transactions with Doosan E&C for 10 years or more (excellent companies and the most excellent companies) and are willing to join. The purposes of the association are networking, social contribution and shared growth with Doosan E&C.

Q2. What are major activities of Doowooh?

Its major activities are varied and as follows: ① workshop (training) ② social contribution (donation to the underprivileged, Building Love House and voluntary work in rural villages) ③ safety programs (safety patrol program) ④ meetings and ⑤ pep rallies.

Q3. What would you suggest to Doosan E&C as its partner?

We feel proud to be alongside Doosan E&C which has over 50 years of history. When sustainable management is the norm, we expect the company to seek for sustained growth with us, based on three pillars: economic profits, environmental soundness and social responsibility.

Activities of Doowooh

Major Activities	Frequency	Activities
Workshop	Once a year	Training and pep rallies
Social Contribution Activities	Once a year	• Voluntary work in a rural village • Habitat • Donation to the underprivileged (groups)
Safety Campaign	Once a year	Raising the awareness of safety on sites
Meetings	Routinely	Meetings after each activity is over

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Governance

Independence and Transparency of the Board of Directors

Doosan E&C has established the BOD-driven advanced corporate governance, ensuring a transparent and reliable management system. We are also committed to gathering attention from investors and building a trust based on a reliable relationship with stakeholders through strengthening our corporate competitiveness.

Composition and Operation of the BOD

The Board of Directors (BOD) of Doosan E&C consists of two internal directors and three external directors to ensure the independence and transparency in the decision making process. All external directors are independent external (hereinafter ‘external directors’). The roles of the BOD include not only convening shareholders’ meeting and deliberating financial issues but also establishing our company’s basic management policies and comprehensive operation plans.

Reinforcing the Independence of the BOD

External directors, who have never been in relationships of special interests or financial transactions, are appointed among candidates with expertise and experiences in law, tax and policies. External directors conduct objective monitoring and surveillance for management activities, and we provide the necessary information and training for them to perform their job seamlessly.

Transparent Disclosure of Information

The BOD regulations, roles, responsibilities and resolutions are reported on our website. The company also discloses BOD-related materials that should be made public on the DART of the Financial Supervisory Service.

BOD Composition			
Position	Name	Duty	Date of Appointment
Internal Directors	Byung-hwa Lee	CEO	July 3, 2015
	Jeong-ho Song	CFO	March 29, 2013
External Directors	Chang-seop Kim	Head of the Audit Committee Member of the Internal Transaction Committee Member of the External Director Recommendation Committee	March 27, 2015
	Jong-won Choi	Head of the External Director Recommendation Committee Member of the Audit Committee Member of the Internal Transaction Committee	March 29, 2013
	Sang-mun Ham	Head of the Internal Transaction Committee Member of the Audit Committee Member of the External Director Recommendation Committee	March 29, 2013

BOD Operation				
Classification	Unit	2013	2014	2015
Number of times the BOD is Held	Number of cases	10	17	14
Attendance Rate of External Directors	%	89	81	93

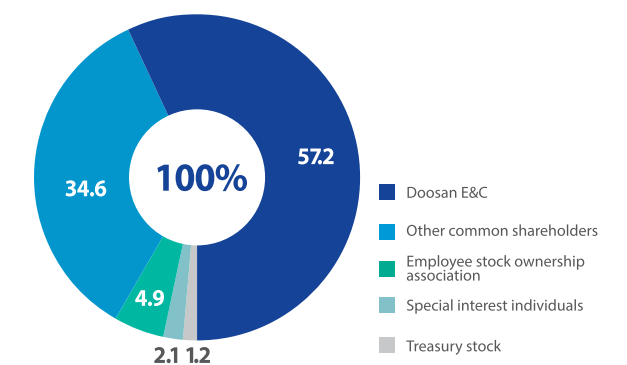
Committees under the BOD

The Internal Transaction Committee, the Audit Committee and the External Director Recommendation Committee were established under the BOD, to ensure professionalism and fairness. Efforts are made to raise the efficiency of the decision making process.

Committee	Major Functions	Members
Audit Committee	Audit on accounting and operations Internal accounting management system Evaluation of operational status Approval for appointment of external auditors	Three external directors
Internal Transaction Committee	Deliberation and decision-making on transactions among affiliates	Three external directors
External Director Recommendation Committee	Recommendation of candidates for external directors	Three external directors

Composition of Shareholders

The total number of stocks issued as of December 2015 is 683,433,224 and the majority shareholder is Doosan E&C, which owns 57.2% of the total stock issued. Doosan E&C reflects the opinions of shareholders on management activities throughout corporate management by organizing annual meetings of shareholders.



Risk Management

Risk Management System

We prevent risk factors by preemptively selecting potential risks through systematic risk management. The company-wide risk management system is made more sophisticated and the BG management autonomy is operated for managing risks where specifics of individual projects are reflected.

Risk Management Process

Project risk management is based on the entire process of a project. The value chain of industries which produce orders is categorized into six stages where the Project Risk Management System is established, statutorily prescribed and managed accordingly. The stages are divided into the order placement stage and the project execution stage. Risks that might occur in each stage are measured and analyzed by the company and BG units for managing risks during all the stages of projects.

Major Activities for Each Process

Bidding Stages			Implementation Stages		
1st stage Selecting the project for participation	2nd stage Making a bid proposal	3rd stage Signing the contract	4th stage Preparing for the project	5th stage Conducting the project	6th stage Settlement of the project
• Review rough profits and losses • Review participating projects	• Review rough conditions - Review of P&L - Review of sales and demand • Analyze risks	• Signing contracts - Review of terms and conditions - Set the target cost rate - Proceed with licensing - Conditions of sales	• Project handover - Complete the handing over between sales team and on site - Manage SPC investments	• Establish the implementation plan and carry out construction for the project - Risk management - Make an interim report on business profits and losses - Manage residents	• Complete the report on the project

Risk Management in the Execution Stage

We conduct deliberation of orders placed by strengthening the deliberation procedure to acquire high-yield project orders. We seek for resolving and minimizing risks through an order deliberation process in two stages.

Project Deliberation Body

Pre BAC ¹⁾	• Team directors reviewing and discussing risks in advance • Deciding on whether or not to bring up to BAC for discussion after balancing the discussion results
BAC	• Executives discussing risks in advance and making decisions through voting • Reporting the deliberation results to the CEO
PRC ²⁾	• When it is challenging to implement (pre) BAC due to limited information - Deciding whether or not to resume the housing subscription project, which has been already acquired - Deciding on pre-entry prior to binding • Discussing other issue project targets

1) Bid Approval Committee 2) Project Review Committee

Checklist on Risks

We specify financial and non-financial risks in individual projects and review them at each stage, to respond to all types of risks that are predicted or suddenly occur during the entire process of construction and post-management starting from the initial stage.

Major Risks					
Type		Business	Financial	Contingent Liabilities	Others
Housing Subscription project	Common	<ul style="list-style-type: none">•Market and subscription feasibility•Permit and approval•Cost•Business timeline	<ul style="list-style-type: none">•Payment conditions and financial resources•Funds balance for each period•Profit and loss•Triggers for housing subscription	<ul style="list-style-type: none">•Presence of credit exposure•Accountable completion of construction guarantee•Expected petitions	
	Housing/ Development	<ul style="list-style-type: none">•Presence of land acquisition	<ul style="list-style-type: none">•Level of equity for construction companies•Order of money withdrawal		<ul style="list-style-type: none">•Risks for construction companies
	Urban Renewal	<ul style="list-style-type: none">•Subscription by the Association•Emergency Response Coordinating Team, etc.	<ul style="list-style-type: none">•Risks in cashing in		<ul style="list-style-type: none">•Leadership of the executive division of the Association
Public Private Partnership-based Projects		<ul style="list-style-type: none">•Business timeline•Policy changes in the government•Review of the volume of demand	<ul style="list-style-type: none">•Sunken cost•FI investment•Funds balance, and profit and loss	<ul style="list-style-type: none">•Cash deficiency support•Limit and demand volume	<ul style="list-style-type: none">•Cost

Risk Management in the Execution Stage

We run various councils depending on each project execution stage under the leadership of BG Planning/PM Team, to manage risks in advance that might occur in project execution. Risks are perceived early and respective competencies are strengthened through a periodic management process throughout all the aspects of cost, process, quality and safety, etc.

Construction Management Council

PCM (Pre Construction Meeting)	CRM (Construction Review Meeting)	PFM (Pre Final Meeting)
• Conducting within two months from ground breaking • Site analysis • Major risk analysis • Process planning • Strategy reporting on on-site execution	• Quarterly execution • Verification of cost adequacy • Process management adequacy • Quality management adequacy • Safety management inspection	• Conducting three months prior to completion • Construction delay risks • Review of BG-level support

CSR Performances: Economy, Society and Environment

Economic Performance

Classification			Unit	2013	2014	2015
Separate financial statement	Total assets		KRW in millions	4,745,785	5,011,125	4,168,610
		Current assets	KRW in millions	2,421,651	2,459,346	1,599,160
		Non-current assets	KRW in millions	2,324,134	2,551,779	2,569,450
	Total liabilities		KRW in millions	2,736,410	3,001,911	2,681,906
		Current liabilities	KRW in millions	2,201,433	2,541,307	2,298,088
		Non-current liabilities	KRW in millions	534,977	460,604	383,818
	Total equity		KRW in millions	2,009,375	2,009,214	1,486,704
	Sales		KRW in millions	2,165,840	2,135,283	1,737,770
	Operating profit		KRW in millions	67,421	134,169	(169,742)
	Non-operating income		KRW in millions	(15,603)	15,378	(21,066)
	Net profit		KRW in millions	(33,676)	(48,937)	(497,978)
Consolidated financial statement	Total assets		KRW in millions	4,950,416	5,133,091	4,225,712
		Current assets	KRW in millions	2,534,636	2,557,121	1,688,094
		Non-current assets	KRW in millions	2,415,780	2,575,970	2,537,618
	Total liabilities		KRW in millions	2,934,973	3,170,495	2,811,405
		Current liabilities	KRW in millions	2,308,227	2,648,667	2,368,566
		Non-current liabilities	KRW in millions	626,746	521,828	442,839
	Total equity		KRW in millions	2,015,443	1,962,596	1,414,307
	Sales		KRW in millions	2,203,904	2,208,014	1,805,357
	Operating profit		KRW in millions	64,842	132,836	(166,913)
	Non-operating income		KRW in millions	(11,561)	14,780	(21,066)
	Net profit		KRW in millions	(60,325)	(68,580)	(520,746)
New orders			KRW in 100 millions	12,867	19,145	22,620

CSR Performances: Economy, Society and Environment

Social Performance

Classification			Unit	2013	2014	2015
Total employees			Employees	1,787	1,849	1,854
Employment type	Regular		Employees	1,553	1,642	1,495
	Non-regular		Employees	234	207	359
Age group	20s		Employees	243	194	180
	30s		Employees	717	752	807
	40s		Employees	600	643	61
	50s and over		Employees	227	260	256
Socially marginalized	Female		Employees	125	133	210
	Disabled		Employees	24	29	23
	Veterans		Employees	23	26	27
	Foreigner		Employees	-	-	4
Gender	Male		Employees	1,662	1,716	1,644
	Female		Employees	125	133	210
New employment	Regular positions		Employees	329	157	24
	Non-regular positions (excluding dispatched positions)		Employees	49	42	46
Ratio of individuals that have received periodic performance evaluation ¹⁾			%	70.3	75.3	71.2
Childcare and maternal leave ²⁾	Number of employees using childcare and maternal leave	Male	Employees	-	-	2
		Female	Employees	5	5	10
	Return to work after parental leave	Male	Employees	-	-	-
		Female	Employees	2	3	2
	Rate of over 1-year retention after return to work	Male	%	-	-	-
		Female	%	100	67	50
Rate of employee turnover	Male		%	18.3	13.4	14.7
	Female		%	23.2	9.6	8.1
Retirement annuity	Amount of reserves		KRW in 100 millions	264	442	444
	Subscribers (DB-type)		Employees	1,881	1,739	1,667
Industrial disaster rate ³⁾	Construction industry	Number of full-time workers	Employees	12,666	10,822	9,244
		Number of converted disaster victims	Employees	56.75	43.29	26.81
		Converted disaster rate	%	0.45	0.40	0.29
	CPE	Number of full-time workers	Employees	1,758	1,580	1,343
		Number of converted disaster victims	Employees	5.00	11.00	3.00
		Converted disaster rate	%	0.28	0.70	0.22

1) Targeting regular employees who have worked for one year or higher
2) For data of 2013-2014, some content and numbers written in the previous year have been partially changed due to changes in the writing standards.
3) Data released by Korea Occupational Safety & Health Agency in 2014, and data subject to inspection in 2015

Classification			Unit	2013	2014	2015
Employee training	Executives	Total training hours	Hours	1,024	613	1,196
	Employees	Total training hours	Hours	100,760	134,468	67,677
		Hours of training per employee	Hours	67.1	72.0	39.3
		Costs of training per employee	KRW in thousands	666	368	346
Total number of e-learning courses taken			Number of courses	9,119	10,704	11,469
Number of e-learning courses taken per individual			Number of courses	5.1	5.8	6.8
Social contribution ¹⁾	Amount of investment	KRW in millions	196	248	237	
	Hours of participation	Hours	7,420	6,079	5,866	
	Number of participants	Employees	800	1,884	2,051	
Shared growth	Suppliers	Amount of procurement	KRW in 100 millions	8,165	9,234	7,365
		Loan extension ²⁾	KRW in 100 millions	15.4	20	-
	Win-win cooperation	Companies supported ³⁾	Number of courses	6	7	5
		Amount supported ⁴⁾	KRW in 100 millions	1	1	1
	Early bonus payment for traditional holidays ⁵⁾		KRW in 100 millions	88	109.2	25.5

1) Changes in performance indicators: Number of programs → Number of participating hours
2) Direct support and guarantee, etc.
3) Companies subject to support in the Industrial Innovation Movement
4) Contribution of funds in Industrial Innovation Movement 3.0
5) Early bonus payment for New Year's Day and Chuseok (Korean Thanksgiving Day)

CSR Performances: Economy, Society and Environment

Environmental Performance

Classification			Unit	2013	2014	2015
Direct energy*	Diesel	For vehicles	GJ	234.23	78,434.39	26,660.56
	Gasoline	For vehicles	GJ	516.81	10,835.61	7,806.92
	LPG butane	For vehicles	GJ	-	-	88.95
	LPG	For cutting and equipment	GJ	-	-	4,547.32
	City gas		GJ	161,855.76	320,247.13	162,698.42
	Lignite		GJ	-	-	2,041.20
	Diesel	For concrete curing	GJ	9,737.34	199,367.19	5,814.70
Indirect energy*	Electricity		GJ	427,272.83	1,165,667.00	607,307.26
Total energy use (GJ)			GJ	599,615.97	1,774,551.32	817,816.24
Basic unit energy use (GJ / Sales)			GJ/KRW in 100 millions	27.21	80.37	45.30
GHG emissions	Total		tCO ₂ e	-	66,271.71	45,526.80
	Scope 1		tCO ₂ e	-	30,351.33	15,822.41
		Buildings	tCO ₂ e	-	966.37	3,229.83
		Construction	tCO ₂ e	-	4,025.63	3,195.58
		Equipment	tCO ₂ e	-	11,512.50	9,397.00
		Ready mixed concrete**	tCO ₂ e	-	13,846.83	-
	Scope 2				35,920.38	27,607.28
		Buildings	tCO ₂ e	-	3,181.11	3,158.57
		Construction	tCO ₂ e	-	8,989.31	8,366.71
		Equipment	tCO ₂ e	-	20,603.58	16,082.00
		Ready mixed concrete**	tCO ₂ e	-	3,146.38	-
	Scope 3	Suppliers	tCO ₂ e	-	-	2,097.12

* Scope of data collection: Doosan E&C (for diesel, including suppliers)
** Handover of emissions following the sell-off of the ready-mixed concrete business

Classification			Unit	2013	2014	2015
Waste water generation			m³	1,139.24	5,103.23	3,798.64
	CPE Plant 1	Entrusted (evaporative concentration)	m³	488.47	1,404.00	782.99
	CPE Plant 2	Entrusted (evaporative concentration)	m³	650.77	744.71	669.40
	HRSG Plant	Entrusted (heavy industries)	m³	-	2,952.41	2,345.19
		Entrusted (outside)	m³	-	2.11	1.06
Amount of waste emissions ¹⁾	Onsite waste		ton	55,234	4,084	88,125
		Recycled	ton	2,400	1,383	770
		Entrusted (outside)	ton	52,674	2,504	86,159
	Designated waste		ton	160	197	1,195
		Entrusted (outside)	ton	160	197	1,195
Waste recycling rate (Recycled waste / total waste)			%	4.35	33.86	0.87
NOx	CPE	kg	2,760.04	4,590.50	3,092	
SOx	CPE	kg	1,160.00	839.30	2,052	
Concentration level of dust emissions	CPE	kg	4,244.48	9,644.00	5,824.39	
COD	CPE	mg/L	1.4	2.5	Measurement data not available.	
BOD	CPE	mg/L	2.7	Below 1.0	Measurement data not available.	
Suspended Solids (SS)	CPE	mg/L	2	3	Measurement data not available.	
Cost for environmental investment	CPE	KRW in millions	-	12,144	-	

1) What was recycled at the consignment company in 2014 was calculated as the recycled amount at Doosan E&C's

Appendix

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GRI G4 Index

General Standard Disclosures

Code	Code Description	Page	External Assurance
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G4-4	The primary brands, products, and services	10, 11	62~63
G4-5	The location of the organization's headquarters	2	62~63
G4-6	The number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	10, 11	62~63
G4-7	The nature of ownership and legal form	10, 11	62~63
G4-8	The markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	10, 11	62~63
G4-9	Scale of the organization	53, 54	62~63
G4-10	Status of employment type, contract, and region	10, 11, 54	62~63
G4-11	The percentage of total employees covered by collective bargaining agreements	24	62~63
G4-12	The organization's supply chain	47~49	62~63
G4-13	Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	10, 11	62~63
G4-14	Precautionary approach or principle is addressed by the organization	52	62~63
G4-15	List Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	65	62~63
G4-16	Memberships in associations (such as industry associations) and / or national / international advocacy organizations in which the organization	64	62~63
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G4-19	List all the material Aspects identified in the process for defining report content	17~19	62~63
G4-20	For each material Aspect, report Aspect Boundary within the organization	16~19	62~63
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G4-22	The effect of any restatements of information provided in previous reports, and the reasons for such restatements	2	62~63
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Report Profile			
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G4-31	Provide the contact point for questions regarding the report or its contents	2	62~63
G4-32	Report the 'in accordance' option the organization has chosen	59~61	62~63
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Governance			
G4-34	Report the governance structure of the organization, including committees of the highest governance body	51	62~63
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G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	18, 19	62~63

GRI G4 Index

Specific Standard Disclosures

Environmental

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Effluents and Waste			
	Generic DMA	42	62~63
EN22	Total water discharge by quality and destination	43, 57	62~63
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Products and Services			
	Generic DMA	45	62~63
EN27	Extent of impact mitigation of environmental impacts of products and services	45, 46	62~63

Labor Practices and Decent Work

Code	Code Description	Page	External Assurance
Employment			
	Generic DMA	25	62~63
LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	55	62~63
LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	55	62~63
LA3	Return to work and retention rates after parental leave, by gender	55	62~63
Occupational Health and Safety			
	Generic DMA	29	62~63
LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	29~31	62~63
LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities,by region and by gender	55	62~63
LA7	Workers with high incidence or high risk of diseases related to their occupation	29~31	62~63
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LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	25~28	62~63
LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	54	62~63
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SO1	Local Communities	32, 33, 55	62~63

Product Responsibility

Code	Code Description	Page	External Assurance
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	Generic DMA	38	62~63
PR5	Results of surveys measuring customer satisfaction	40	62~63
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	There is no Complaints.	62~63

Independent Assurance Statement

The Stakeholders of Doosan E&C

Introduction and Objective of Work

IMCSR Co., Ltd.(the ‘assurance provider’ hereafter) has been engaged by Doosan E&C to conduct an independent assurance of its 2015 Doosan E&C CSR Report(the ‘Report’ hereafter). This assurance statement applies to the related information included within the scope of work described below. The information and its presentation in the Report are the sole responsibility of the management of Doosan E&C. The assurance provider was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

Assurance Standard and Scope of Work

The assurance process was conducted in line with the requirements of the Assurance Standard AA1000AS(2008) Type1 assurance. The moderate level of assurance has been applied. GRI G4 guidelines and ISO 26000 were also used. The scope of work included:

- Data and information included in the Report;
- Reporting systems and processes, used to collect, analyze and review the information reported;
- Evaluation of the Report against the reporting principles of the GRI G4 guidelines;
- Evaluation of the Report against the GRI G4 ‘In Accordance’ Criteria;
- Evaluation of the Report against the main principles of the AA1000 Assurance Standard;

Methodology

Our work was conducted against standard procedures and guidelines for external assurance of sustainability reports. As part of its independent assurance, the assurance provider undertook the following activities:

- Review of documentary evidence;
- Review of data and information systems for collection, aggregation, analysis and review;
- Site audit and interviews with relevant personnel

Our Findings

On the basis of our methodology and the activities described above, it is our opinion that:

- Doosan E&C has established appropriate systems for the collection, aggregation and analysis of relevant information. The information and data included in the Report are accurate, reliable and free from material mistake or misstatement;
- The Report properly reflects the principles for defining report content and for defining report quality according to GRI G4 guidelines.
- The Report has been prepared in accordance with the ‘Core Option’ of GRI G4. Further detail is provided below;

General Standard Disclosures

The assurance provider reviewed General Standard Disclosures, and believes that the Report meets the Core Option requirements of General Standard Disclosures.

Specific Standard Disclosures

The assurance provider reviewed Material Aspects, DMAs and Indicators, and believes that the Report meets the Core Option requirements of Specific Standard Disclosures.

- The Report properly reflects the organization's alignment to and implementation of the AA1000 Assurance Standard(2008) principles of Inclusivity, Materiality and Responsiveness in its operations. Further detail is provided below:

Inclusivity

Doosan E&C retains the process in key stakeholder identification and engagement for stakeholder engagement. Doosan E&C has implemented the various programs for stakeholder engagement. The result of stakeholder engagement has been reflected to the Report appropriately.

Materiality

The Report addresses the range of environmental, social and economic issues of concern that Doosan E&C has identified as being of highest material importance. Materiality assessment in terms of impact on business and concern of stakeholder led to material issues.

Responsiveness

Doosan E&C has integrated material issues into organization’s strategy and operation. The Report properly reflects the organization’s response to the material issues which are defined through process for identifying material issues.

Key areas for Ongoing Development

The following is a recommendation which does not affect our conclusions on the assurance statement. Based on the work conducted, we recommend Doosan E&C to consider the following:

- Disclosures on management approach(DMAs) to CSR material issues are presented at the Report in a clear, understandable, and accessible manner. It is advisable to extend the reporting of the quantitative objectives and performances related to CSR material issue more in the future;
- Each project area of the Report reflects the positive aspects of the performances that Doosan E&C achieved regarding the CSR issues. However, in order to maintain the balance of the report, it is recommended to also include deriving issues having poor performances, and efforts for resolving such issues;

Statement of Independence, Impartiality and Competence

No member of the assurance team has a business relationship with Doosan E&C. We have conducted this assurance independently, and there has been no conflict of interest. The assurance team consists of the best experts equipped with sufficient knowledge and expertise in the relevant areas.



May, 2016

Hyun Lee, CEO, IMCSR Co., Ltd.

Hyeran Kim, Expert Adviser

Taehun Jang, Expert Adviser

Association Membership

Association		
Construction Business CS Council	Construction Vision Forum	Association of Construction Safety
Association of KOSHA 18001 for Construction Business	Gyeongnam Employers Federation	Gyeongnam Industrial Security Association
Education Development Association	Green Korea 21 Forum	Korean Nurses Association
Construction Association of Korea	Architectural Institute of Korea	Korean Society of Transportation
The Korea Industrial Safety Association	The Korea Chamber of Commerce & Industry	Korean Society of Water & Wastewater
Korea Mech. Const. Contractors Association	The Society of Air-conditioning and Refrigerating Engineers of Korea	The Korean Institute of Electrical Engineers
Korea Specialty Contractors Association	Korea Society of Civil Engineering	Korean Society of Environmental Engineers
Maekyung Safety & Environment Institute (SEL Club)	North Korea Water Society	Korean Association of Occupational Health Nurses
World Road Association	Korea Engineering & Consulting Association	Incheon Smart City Association
The Federation of Korean Industries	Chamber of Commerce and Industry (Seoul, Changwon)	Integrated Defense Association of Changwon Industrial Complex
PR Association of Changwon Industrial Complex	Korea Institute of Building Information Modeling	The Construction Management Association of Korea
Korea Facility Management Association	Korea IR Service	Korea Construction Value Engineering Research Institute
Korea Federation of Construction Contractors	Korea Institute of Construction Engineering and Management	Korea Construction Engineers Association
The Korea Construction Transport New Technology Association	Korea Society for Construction Quality	Korean Association of Construction Complaints Control (Civil Engineering)
The Korean Association of Construction Environment	The Korea Institute of Building Construction	Korean Institute of Architectural Sustainable Environment and Building Systems
Korea Employers Federation	Korea Economic Research Institute	Fair Competition Federation
Korea institute for Structural Maintenance and Inspection	Korea institute for Structural Maintenance Inspection	Korea Green Building Council
Korea Association of Machinery Industry	Korean Road Forum	Korea National Committee on Large Dams
Korean Society of Road Engineers	Korea Road Association	Korea Remodeling Association
Korea Mecenat Association	Korea International Trade Association	Korea Society of Water Environment
Korean Society of Disaster Security	Korean Society of Hazard Mitigation	Korean Society for Advanced Composite Structures
Korea Society Architectural Hybrid System	Korea Developer Association	Korea Industrial Technology Association
Korea Listed Companies Association	Korea Institute of Ecological Architecture and Environment	The Society of Living Environmental System, Korea
Korean Association of Air Conditioning Refrigerating and Sanitary Engineers	Korea Fire Facility Association	Korea Fire Safety Association
The Korean Society for Noise and Vibration Engineering	Korea Water Resource Association	Korean Society for Rock Mechanics
Korea Energy Engineers Association	The Korean Society of Disaster Information	Korea Electrical Contractors Association
Korea Electric Engineers Association	The Korean Institute of Electrical and Electronic Materials Engineers	The Korean Railway Electricity Technology Association
Computational Structural Engineering Institute of Korea	Korea Information & Communication Construction Association	The Korean Institute of Illuminating and Electrical Installation Engineers
The Korean Housing Association	Korea Housing Association	Korean Geotechnical Society
The Korean Regional Development Association	Korea Society of Geothermal Engineers	Korean Society for GeoSpatial Information System
Korean Railway Construction Engineering Association	The Korean Society for Railway	The Korea Railway Association
Council on Tall Buildings and Urban Habitat Korea	Korea Concrete Institute	Korean Tunneling and Underground Space Association
Korean Foundation for Quality	Korea River Association	Korean Institute of Fire Science & Engineering
Korea Environmental Engineer Association	International Contractors Association of Korea	Korea Environmental Preservation Association

UNGC’s Ten Key Principles

Human Rights

1. We support and respect internationally declared Human Rights.
2. We do not engage in infringement of Human Rights.

Labor

3. We acknowledge rights to freedom of association and collective bargaining.
4. We abolish all kinds of forced labors.
5. We effectively abolish children’s labor.
6. We eliminate of discrimination in respect of employment and occupation.

Environment

7. We support a preventative approach to environmental issues.
8. We take the lead in assuming larger environmental responsibilities.
9. We support environmentally-friendly technology development and its diffusion.

Anticorruption

10. We strive to eradicate all kinds of corruption including unjust enrichment and bribe.

Doosan E&C Supports the Ten Principles of the United Nations Global Compact.